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ABSTRACT

The fourth of four volumes in Research Report No. 7 of the Health Services Mobility Study (HSMS), this book contains the extended task names of all the tasks whose descriptions can be found in the three prior volumes. It serves as an index to all the tasks by listing the volume in which each task description appears. Chapter 1 of this volume defines "tasks" and tells how the descriptions were developed. Chapter 2 is a guide to the tasks arranging the abbreviated task names in two groupings with code numbers and volumes given. Groupings are by area or system of the body and by function, such as technologist contrast examinations, patient care, and radiation protection and monitoring. The extended task names are presented in numerical order by code number in Chapter 3. The task descriptions are offered for use as instructional materials, as inputs to the design of career ladders, for the structuring of jobs and assignment of work to job titles, and as inputs to the development of performance evaluation instruments and proficiency tests. (Volume 1 contains 143 task descriptions covering most of the medical activities carried out by diagnostic radiologists. Volume 2 (Part I and Part II) contains 76 task descriptions, most of which are examination tasks carried out by radiologic technologists. Volume 3 contains 149 task descriptions that cover activities in the area of nursing (patient care), film processing, quality assurance, radiation protection, machine maintenance, housekeeping, and administration at the departmental level). (HD)

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TASK DESCRIPTIONS IN DIAGNOSTIC RADIOLOGY

Research Report No. 7

Volume 4

INDEX OF TASKS BY CODE NUMBER AND EXTENDED NAME

by
Eleanor Gilpatrick, Director
Health Services Mobility Study

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PREFACE

The Health Services Mobility Study (HSMS) has been involved in research in the health manpower field in the United States since 1967. It has designed methods to analyze jobs, create job ladders, develop curriculum objectives, and evaluate performance. HSMS is sponsored by the City University of New York (CUNY) through the Research Foundation and the Hunter College School of Health Sciences. Since 1967, funding for HSMS has come from the Office of Economic Opportunity, the Health Services and Mental Health Administration and the Bureau of Health Manpower, both of HEW, and, primarily, the U. S. Department of Labor, Manpower Administration, now the Employment and Training Administration. The Director of the Project, Eleanor Gilpatrick, holds the rank of Associate Professor at the Hunter College School of Health Sciences, City University of New York.

This report presents the core data of the first application of the HSMS task analysis method to an entire functional area, i.e., Diagnostic Radiology. This work is reported in two Research Reports as follows:

Research Rpt. No. 7	TASK DESCRIPTIONS IN DIAGNOSTIC RADIOLOGY
Vol. 1	Medical Tasks: What the Radiologist Does.
Vol. 2	Radiologic Technologist Tasks Dealing With Patient Procedures.
Vol. 3	Machine-Related, Patient Care and Administrative Tasks: What Radiologists, Technologists, Nurses, and Physicists Do To Run Things and Look After Patients and Equipment.
Vol. 4	Index of Tasks by Code Number and Extended Name.

These four volumes are the "core" documents, i.e., they present approved "normative" task descriptions in radiology. The first three volumes present the tasks in a given area in numerical order by code number. Each document describes how the tasks were developed and how to read them. Each includes listings that arrange the tasks by specialty or function. Volume 4 summarizes the tasks presented in the first three volumes. It lists the extended names of all the tasks in numerical order by task code number, citing the volume in which the task description is to be found.

Research Rpt. No. 8	USING TASK DATA IN DIAGNOSTIC RADIOLOGY
Vol. 1	Job Ladders in Diagnostic Radiology: Assigning Tasks to Jobs.
Vol. 2	Safe Practice and Radiation Health Protection Aspects of Tasks.
Vol. 3	Curriculum Objectives For Radiologic Technology.

These volumes make use of and refer to the tasks presented in Research Report No. 7. Therefore, only the abbreviated names of tasks and their code numbers are used when the tasks are discussed.

Volume 1 shows the assignment of tasks to levels, indicates how tasks relate to one another, and makes recommendations on a job ladder and job structuring. It summarizes and includes the skill and knowledge data related to the tasks in Research Report No. 7. It tells the hospital administrator how to use the data for assigning tasks to titles and jobs.

Volume 2 highlights the safe practice features of the task descriptions.

Volume 3 presents the curriculum objectives for use in an educational program at the radiologic technologist level. Research Report No. 7 serves as instructional materials in connection with this volume.

The research reported herein was conducted under a contract with the Employment and Training Administration, U. S. Department of Labor, under the authority of the Comprehensive Employment Training Act of 1973. Researchers are encouraged to express their own judgment freely. Interpretations or viewpoints stated in this document do not necessarily represent the official position or policy of the Department of Labor or the City University of New York.

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CHAPTER 1

ABOUT THE TASK IDENTIFICATIONS AND DESCRIPTIONS

INTRODUCTION

Research Report No. 7 is a product of the first full-scale demonstration of the task description method of the Health Services Mobility Study (HSMS). All the work found in a department of Diagnostic Radiology is presented as task descriptions in the first three volumes of the Report.

This volume contains the extended task names of all the tasks whose descriptions can be found in the three prior volumes. It serves as an index to all the tasks by listing the volume in which each task description appears.

Volume 1 contains 143 task descriptions covering most of the medical activities carried out by diagnostic radiologists. Volume 2 contains 76 task descriptions of which most are examination tasks carried out by radiologic technologists. Volume 3 contains 149 task descriptions that cover activities in the areas of nursing (patient care), film processing, quality assurance, radiation protection, machine maintenance, housekeeping, and administration at the departmental level. It includes these tasks without indicating the job titles in which they appear.

This chapter discusses the HSMS definition of task and summarizes how the task identification work is done. The extended task names are presented in numerical order by code number in Chapter 3. Chapter 2 is a guide to the tasks. It arranges the abbreviated names of the tasks in two logical groupings with the code numbers and volumes given so that the reader can find the task descriptions that interest him or her. The groupings in Chapter 2 list the tasks by area or system of the body and by function, such as technologist contrast examinations, patient care, and radiation protection and monitoring.

ABOUT THE TASKS

The HSMS task definition is presented later in this chapter. This section describes how the task descriptions were developed and indicates the coverage in this Report.

Orientation

If one conceives of all the kinds of work that get done in a department in order for it to carry out the function of diagnostic radiology, one might think of a great field or pool of work. Each kind of work is carried out in discrete units. Theoretically, it does not matter how the units are allocated to jobs, as long as all the work is done. In practice, although common sense is usually enough to discern that some tasks require someone trained in radiologic technology or as a radiologist, there are always areas where it is unclear who should do what.

The HSMS method avoids this issue until it is clear what the work units *are*. Only at a later stage do we determine the skill and knowledge requirements for work units and their relative levels. The

HSMS method begins with descriptions of all the work units, regardless of the job titles in which they are found.[1] We call the work units "tasks."

The HSMS method of task identification is based on a specific definition of task. Once identified, a task has a code number, an abbreviated name, an extended name, and a full task description. The task descriptions present the task procedures in a logical sequence, including a good deal of detail. The extended task name is a summary of the essential task steps. Chapter 3 of this volume contains the extended task names of the tasks presented in this Report, arranged by code number.

Collection of Data

The work in task identification and description is done in a multi-stage process. HSMS job analysts work in teams. They first determine how many people and what titles they must cover to have access to every kind of work done in the department. With each "performer" interviewed, the analysts first obtain an idea of all the work covered by that individual. The analysts then apply the HSMS definition of task (discussed later in this chapter) to break the work down into specific task units, making sure that nothing is left out. This is the task identification stage. From this point the performers are interviewed and sometimes observed, and the analysts write descriptions of how the tasks are done, including contingencies, alternative approaches and emergencies. For Research Report No. 7 we interviewed as many performers as was necessary to cover all the work in the department, including radiologists, radiologic technologists, nurses, technicians, aides, physicists and supervisors.

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[1] This assignment of work units to jobs varies according to the size of an institution, local practices and laws, relative scarcities of types of manpower, and the extent to which an institution is rationally organized.

Simultaneously, we collected as much current literature as we could which in any way described the work of the department. This included articles in professional journals, text books, operators' manuals for equipment, current state and federal legislation, and proceedings of conferences dealing with safe practice and related issues of patient care. We also had informal talks with professionals, educators, and people in government agencies.

The literature and discussions provided an overview concerning certain steps and activities which should be represented in the task descriptions even if not always represented in current practice. These concern protection of the patient from unnecessary radiation, protection of the possible fetus, protection from contamination or contagion, sympathetic and dignified attention to the patient, and protection of staff from exposure to radiation. We call such objectives "desiderata."

The literature also provided information on alternative methods for carrying out tasks, contingencies to be taken account of, varieties of equipment available, some indication of preferred practices, and descriptions of tasks not being done at the institutions where we did our interviewing. The tasks in quality assurance are based primarily on descriptions in documents.

The task descriptions are first written by the HSMS analysts and then go to the HSMS Director for review and editing. At this stage the tasks are rewritten to incorporate the literature of the field and the desiderata. The task identifications are critically reviewed for conformity to the HSMS definition, and, when necessary, the analysts are sent back to the field to obtain additional information.

The next phase involves critical review by professionals other than the performers who were interviewed by the HSMS analysts. Each of the tasks presented in the first three volumes has had a minimum of three reviewers; many have been evaluated by five reviewers.

We were very fortunate to obtain as reviewers supervisory staff at Montefiore Hospital, and radiologic technologists and health physicists with national stature. Respected radiologists, staff of the Bureau of Radiological Health of FDA, the American Society of Radiologic Technologists, and the Joint Review Committee on Education in Radiologic Technology have given us the benefit of their expertise, as have educators and equipment manufacturers.

The reviewers are asked to evaluate the tasks for correctness of language and sequence of procedures, to note omission of any tasks in a specialty area, and to indicate acceptable alternative methods. Reviewers are asked to concentrate on how the tasks should be done and also to reflect national practice.

After the tasks are reviewed, the suggested changes are incorporated, additional tasks are collected and described when necessary, and any new or totally revised tasks are resubmitted for review as described here. When a task has been reviewed and revised as required by at least three reviewers, it is referred to as a "normative task," or an "N task," and is so marked.

The collection of task descriptions is not like a sample survey. A sample survey would not cover all the work, but would cover only selected work. A sample would pick up the same work at many locations. We pick up and represent each unit of work only once. The reason is that our objective is to describe all approved work procedures for the purposes of developing instructional materials, curriculum objectives, and career ladders. For such purposes we want not just the most typical tasks; we want to cover the accepted but rare or difficult procedures, the emergencies, the contingencies, and the best possible practice. We are normative in approach as well as descriptive. We are not dealing with probability theory, which requires sampling of the "universe" being studied. We attempt to present the universe.

Coverage

Most of the tasks in this Report were collected at Montefiore Hospital and Medical Center in New York City over the period August, 1972, through August, 1976. Montefiore Hospital is a respected major voluntary hospital. Tasks related to obstetrics and gynecology were collected at Mt. Sinai Hospital and Medical Center in New York City, another highly regarded voluntary hospital.

For radiologist tasks we tried to include every procedure carried out by radiologists operating in hospital centers. However, some procedures at specialized centers, such as children's hospitals, may be missing. In a few instances, radiologist tasks that are performed rarely and were not carried out at the hospitals where we were collecting data were described solely from the literature, using the other tasks as models. In such cases we referred to the most recent journal articles or textbooks, and the task descriptions were reviewed by at least four individuals. We omitted tasks that are clearly obsolete or too dangerous to perform based on the advice of our performers and reviewers.

We consciously chose to omit the rare pneumomediastinography and epidural venography, and to omit coronary arteriography by way of the Sones and Amplatz techniques. The latter are usually done by cardiologists. However, we do include pneumography in connection with the radiology of the female reproductive system, and percutaneous coronary arteriography. In pelvimetry we cover only the Colcher-Sussman method.

Two of the radiologist tasks included appear to be controversial. Discography is not unanimously seen to be of value, and spinal cord angiography seems to be considered very dangerous. These two tasks were developed from the literature and critical review.

For the radiologic technologist, alternative procedures and those not carried out at the hospitals where we collected our data were described based on our use of the literature, the radiologist tasks we developed, the inputs of our reviewers, and our models. In several cases we eliminated practices described in the literature which are now considered to be dangerous, useless, or obsolete.

Some tasks carried out by radiologic technologists are included even though the counterpart physician tasks do not exist in our data base. We did not collect physician tasks not done by radiologists, such as operating room radiography and retrograde pyelography, but we have the technologist tasks. Procedures carried out only in specialized centers, such as use of special equipment for localization of foreign bodies in the eye, are not included.

Since some of our radiologist tasks are controversial with respect to their danger or efficacy, we included the radiologic technologist's task only if we included the radiologist's task. Thus we include discography and spinal cord angiography for the technologist, but we do not include pneumomediastinography.

Certain patient care tasks were included which do not appear in radiologic technology texts. These include ECG monitoring in the angiography room, application of manual pressure and pressure bandages after percutaneous catheterization. Reference is made to these procedures in literature for the radiologist. The task descriptions were collected largely from interviews.

We include descriptions of some very new procedures involving computerized transverse axial tomography. We were fortunate to receive access to operators' manuals for the E.M.I. scanner and Pfizer's A.C.T.A. scanner. To make our task descriptions more broadly based than the water-box brain scanner used at Montefiore, we used the literature on this new technology and the manuals to which we had access to write general examination tasks and related maintenance and data retrieval tasks. Our reviewers were asked to evaluate the tasks for their generic usefulness.

We include a body of tasks which describe work with diagnostic x-ray equipment for the purpose of preventive maintenance, quality assurance and radiation protection. Although there is little uniformity with respect to the titles in which the tasks appear, the method of doing the tasks, or whether the tasks are carried out regularly, there is general agreement that the physicist-type tasks have a desirable function. We have attempted to identify broad, idealized tasks which cover the planning of an institution's programs in quality assurance and protection, teaching about equipment and protection, providing advice, and evaluating the programs. We also present the tasks that would be generated if the programs were carried out. The task descriptions reflect, in many cases, the options available for carrying out the task objectives.

Our broad coverage of tasks for large hospitals implies that the work at small scale establishments, such as private offices and ambulatory care facilities, is covered.

DESIDERATA

We have consciously opted to include elements, steps, and whole tasks which represent desiderata, that is, steps or tasks that are beneficial to the patient, others on staff, or the performer. Some of these are briefly referred to below:

1. For the Radiologist

    a. We include consultation tasks for most specialities, so that unwarranted or questionable requests for procedures may be reviewed, alternatives suggested, and the patient spared unnecessary radiation exposure.

    b. We include a check that rules out known or possible pregnancy for female patients of reproductive age, and a check of proper shielding of the patient and anyone to remain in the room during the exposure to radiation. We have the performer using shielding personally. We have the performer consider the patient's radiation exposure history when deciding on additional exposure.

    c. Wherever there is a puncture procedure, we have performer applying pressure to the puncture site. We also have the performer pay attention to sterile technique and isolation or decontamination needs.

d. Wherever an invasive technique is involved we have the performer check for or obtain an informed consent.

e. We have the performer explain to the patient what is happening and what will happen, reassuring the patient, and providing the patient with considerate and respectful care.

2. For the Radiologic Technologist

a. We have the performer review the x-ray requisition to check on the patient's condition, possible allergy, possible extensive cumulative exposure, or recent duplication of the present examination ordered.

b. We have the technologist measure the patient before selecting technique.

c. We have the performer check personally on possible pregnancy. He or she considers and applies appropriate shielding to the patient and to anyone to remain in the room during the exposure.

d. We have the performer collimate to the area of interest, not just to the size of the film.

e. We have the performer consciously notice radiologists' preferences on contrast and density to avoid retakes.

f. We have the performer record exposure dosage when the institution provides and posts such information.

g. We have the performer consider what movement the patient is capable of.

h. We have the performer arrange to have the patient attended, cleansed, and/or taken to the next location when appropriate.

i. We always have the patient's identity verified.

j. We have the performer treat the patient with sympathy and dignity, and provide the patient with information about what is going on or will go on in the procedure.

3. For Other or Any Staff Member

   a. We include the tasks of developing quality assurance and radiation health protection programs, and teaching radiation health protection physics and safety procedures.

      We include the tasks of setting up, maintaining and testing x-ray equipment and processors, the selection of proper shielding for installations and shielding for patients and staff, and the safe deployment of staff. The tasks provide for achieving uniformity of exposure dosage under standard conditions so that cumulative exposure can be considered and quality results assured.

      The tasks provide for a feedback, monitoring system to pinpoint problems before patients or staff are exposed to unnecessary radiation.

   b. We include tasks to make sure that equipment is cleaned with the proper solutions to prevent contamination and infection of patients and staff.

   c. We include tasks to provide for manual and/or mechanical pressure to puncture sites to prevent hematoma. We include tasks to provide emergency care for the patient.

   d. We have any performer treat the patient with sympathy and dignity, and provide the patient with information about what is going on or will go on in the procedure.

THE HSMS DEFINITION OF TASK

In the HSMS view, each work activity needed to produce products, such as radiologic medical services, requires manpower which combines existing technology, knowledge, materials, and equipment with skills. The HSMS work unit is the "task." The HSMS definition of task is designed to result in the identification of a unit of work which can be moved from one job to another without disrupting other activities. The task is thus a unit of work which is smaller than a job as a whole, but large enough to have an identifiable, usable output.

The steps of the task, or elements, unlike the task, do not have an identifiable, usable output which can be independently consumed or used, or which can serve as an input in a further stage of production by an individual other than the performer. The HSMS task definition is as follows:

> A task is a series or set of work activities (elements) that are needed to produce an identifiable output that can be independently consumed or used, or that can be used as an input in a further stage of production by an individual who may or may not be the performer of the task.

In order to facilitate use of the definition, HSMS analysts use the following rules:

1. In principle, someone other than the performer of the task must be able to use or consume the output of the task.
2. Theoretically, it should be possible for there to be an elapse of time between tasks.
3. A task includes all the possible conditions or circumstances which a single performer is expected to deal with in connection with the production stage or the output involved.
4. A task includes all the elements that require continuous judgment or assessment by the same performer in order to assure the quality of the output.
5. A task includes all of the elements needed to produce an output which can be independently used or acted upon without special explanations to the next performer in the next stage of production.

6. A task includes all the elements needed to complete an output to a point at which another performer (who would continue with the next production sequence) would not have to redo any elements in order to continue.

7. A task includes all the elements needed to complete an output to a point at which another performer, in order to continue with the next stage of production, need not perform extra steps.

8. The task must not require that, for another performer to continue with the next stage in a production sequence, current institutional arrangements would have to be changed.

9. A task must be sufficiently broad in statement that it can be rated on its frequency of occurrence.

A code number is assigned to the task which uniquely stands for the contents of the task, covering the task's output, what is used, the kind of recipient or respondent dealt with, and how the task is done. Regardless of the job title, institution, or industry in which the task is found, it will always have the same code number. The number itself has no intrinsic meaning.

The reader will find that many of the administrative and nursing tasks are generic and can be found in many departments. They have been written intentionally to be picked up and recognized wherever they may appear. A given task that appears in different jobs, departments, or institutions is an "overlap" task.

Uses of The Task Descriptions and Names

This document is not intended to describe fully how to use the HSMS task descriptions and names. However, we offer a list of possible uses that will be dealt with in subsequent reports:

1. The task descriptions can be used as instructional materials in the classroom and in clinical training. They provide ordered, logical sequences of steps. They suggest what contingencies, options, and emergencies are associated with the tasks and, for the less familiar specialties, an indication of what is done in a given procedure.

2. The task descriptions can be used in the development of team training.

3. The task descriptions can provide an introduction to, or a basis for evaluation of, safe practice; they can be used to check on whether desired objectives are being accomplished.

4. The task descriptions, when combined with the HSMS skill and knowledge data, can become inputs in the development of performance-based curriculum objectives and educational ladders.

5. The task descriptions can be used as the basis for evaluation of work performance or as inputs to the development of job relevant proficiency tests (particularly for the selection of test content once the skill and knowledge data are collected).

6. The task descriptions can be used as objective references for the development of job descriptions, especially when edited to reflect the practices at a given institution.

7. The task descriptions can also be used in occupational counseling and for purposes of consumer education and protection.

8. The "extended task name," which summarizes the task in a paragraph-length statement, is sufficiently long that ambiguity is avoided when there is a need to quickly grasp the contents of a task for reference purposes.

9. The "abbreviated task name" which indicates the key features of the task is most useful for simple listings.

Note

The reader should be aware that, though the extended task names in Chapter 3 are presented in numerical order by code number, not every number is represented. The first code number is Code 1; the last is Code 560. There are only 368 task names in Chapter 3. The reason is that task code numbers are assigned in sequence as the tasks are processed, and other tasks, which appeared in a prior report, were assigned numbers 1 through 273.

A task name accompanied by an asterisk before the code number indicates that another task was once assigned that code number, but the earlier assignment is now obsolete. All other code numbers in this volume up to Code 273 are tasks that were also found by HSMS in the ambulatory care center where the pilot test of the HSMS method was carried out.

CHAPTER 2

LISTING OF ABBREVIATED TASK NAMES BY CATEGORY AND CODE NUMBER

TASKS LISTED BY SYSTEM OR AREA OF THE BODY*

Category and Abbreviated Task Name	Task Code No.
CIRCULATORY SYSTEM	
Blood	
Deciding on type of non-neurologic angiography procedure to order for any patient in consultation with referring physician, surgeon, and/or other specialist.	469
Conducting peripheral arteriography of any patient by percutaneous selective catheterization or direct needle puncture.	470
Conducting ascending or descending venography of lower extremities of any patient by direct needle puncture.	471
Taking peripheral angiograms of any patient (after percutaneous needle or catheter entry, translumbar puncture, ascending or descending venous entry).	510
Conducting catheter thoracic aortography of any patient.	472
Conducting catheter abdominal aortography and/or selective visceral arteriography of any patient.	473
Conducting percutaneous translumbar abdominal aortography of any patient.	474
Conducting selective bronchial arteriography of any patient.	478
Taking catheter thoracic and/or abdominal aortograms of any patient, and/or selective visceral arteriograms (bronchial or abdominal).	511

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* Not all tasks in the Report are covered in this section.

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

CIRCULATORY SYSTEM

Blood (continued)

Category and Abbreviated Task Name	Task Code No.
Conducting percutaneous splenoportography of any patient.	475
Taking percutaneous splenoportograms of any patient.	516
Conducting selective pelvic arteriography of non-pediatric gravid or nongravid female patient.	476
Taking selective pelvic angiograms of non-pediatric gravid or nongravid female patient.	512
Conducting selective thyroid angiography of any patient.	479
Taking selective thyroid angiograms of any patient.	514
Conducting selective subclavian arteriography of any non-pediatric patient to evaluate thoracic outlet syndrome.	480
Taking selective subclavian arteriograms of non-pediatric patient for thoracic outlet syndrome evaluation.	517
Conducting catheter vena cavography and/or selective renal or adrenal venography of any non-infant patient.	482
Taking catheter inferior vena cavograms and/or renal or adrenal venograms of non-infant patient.	515
Conducting intravenous angiocardiography of any patient by percutaneous selective catheterization or direct needle puncture.	481
Taking intravenous angiocardiograms of any patient.	513
Conducting catheter pulmonary angiography of any patient.	477
Taking selective pulmonary angiograms or selective angiocardiograms of any patient.	518

Category and Abbreviated Task Name	Task Code No.
CIRCULATORY SYSTEM	
Blood (continued)	
Conducting percutaneous coronary arteriography and/or left ventriculography of any patient.	483
Taking percutaneous coronary arteriograms and/or left ventriculograms of any patient.	519
Reading, interpreting and making recommendations on non-neurologic angiographic and related studies and/or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	484
Participating in meetings of angiographers, vascular surgeons and cardiologists to discuss new developments, cases of interest, and case problems in the field of angiography, vascular and cardiovascular surgery.	485
Providing clinical training for radiology residents in non-neurologic angiography.	486
Planning and presenting lectures or case conferences on non-neurologic angiography for radiology residents.	487
Preparing any patient and attaching electrodes for electrocardiogram monitoring.	520
Setting up and monitoring any patient's electrocardiogram during special procedure.	308
Applying digital or manual pressure to any patient's arterial or venous puncture site as ordered.	521
Applying pressure dressing to arterial or venous puncture site as ordered.	522
Drawing blood from any non-pediatric patient's vein on orders.	18
Preparing blood samples for the laboratory.	180

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

CIRCULATORY SYSTEM

Lymph

Category and Abbreviated Task Name	Task Code No.
Deciding whether to order lymphangiography of any patient or alternative studies and recommending technique, in consultation with referring physician.	328
Conducting lymphangiography of any patient.	329
Taking lymphangiograms or lymphadenograms of any patient.	376
Reading, interpreting and making recommendations on lymphangiograms, or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	330
Providing clinical training for radiology residents in lymphangiography procedures.	336
Removing any patient's sutures.	33

DIGESTIVE SYSTEM AND ABDOMEN

Salivary Glands

Category and Abbreviated Task Name	Task Code No.
Conducting sialography of any patient.	433
Taking sialograms of any patient.	375
Reading, interpreting and making recommendations on sialography and related materials or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	434
Providing clinical training for radiology residents in ear, nose and throat radiography and sialography.	435

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
DIGESTIVE SYSTEM AND ABDOMEN	
Abdominal Contents	
Taking plain film radiographs of abdominal contents of non-infant patient.	363
Taking plain film radiographs of abdomen of infant patient.	495
Gastrointestinal and Biliary Tracts	
Deciding on type of gastrointestinal and/or biliary radiographic examinations to order for any patient in consultation with referring physician and/or specialists.	339
Evaluating plain films of pediatric gastrointestinal tract to localize obstructions and/or foreign bodies.	450
Removing foreign object from pediatric upper esophagus under fluoroscopic control.	451
Conducting esophageal radiography of pediatric patient.	452
Conducting a radiographic barium study of upper gastrointestinal tract of pediatric patient.	453
Taking upper GI radiographs of pediatric patient.	499
Conducting a radiographic barium swallow study of esophagus of any non-pediatric patient.	2
Conducting a radiographic barium study of upper gastrointestinal tract of any non-pediatric patient.	3
Conducting a radiographic air contrast study of stomach of any non-pediatric patient.	395
Taking upper GI radiographs of non-pediatric patient.	381

DIGESTIVE SYSTEM AND ABDOMEN

Gastrointestinal and Biliary Tracts (continued)

Category and Abbreviated Task Name	Task Code No.
Conducting small bowel enema radiographic study of any non-pediatric patient.	341
Conducting hypotonic duodenography of any non-pediatric patient.	340
Taking small intestine intubation radiographs of a non-pediatric patient.	382
Conducting a radiographic barium enema study of lower gastrointestinal tract of pediatric patient.	454
Conducting defecography of pediatric patient.	455
Conducting diagnosis and hydrostatic reduction of intussusception of pediatric patient.	456
Taking barium enema, intussusception or defecography radiographs of pediatric patient.	500
Conducting a radiographic barium enema study of lower gastrointestinal tract of any non-pediatric patient.	1
Taking barium enema radiographs of non-pediatric patient.	383
Taking oral cholecystograms and cholangiograms of non-infant patient.	384
Evaluating oral cholecystograms or oral cholangiograms; conducting fluoroscopy and/or post-fatty meal, post-evacuation study of any non-infant patient involved if so decided.	342
Conducting intravenous cholangiography and cholecystography (IVC) of any non-infant patient.	344
Taking intravenous cholangiograms and cholecystograms of non-infant patient.	385
Conducting percutaneous (transhepatic) cholangiography of any non-pediatric patient.	343

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
DIGESTIVE SYSTEM AND ABDOMEN	
Gastrointestinal and Biliary Tracts (continued)	
Conducting T-tube cholangiography of any patient.	345
Taking percutaneous or T-tube cholangiograms of non-infant patient.	386
Taking operative cholangiograms, pancreatograms or similar operative radiographs of any patient.	371
Preparing barium sulfate contrast medium as ordered or for standard use.	79
Changing any patient's colostomy bag on orders.	290
Obtaining and examining fresh stool from any patient and reporting unusual or suspicious appearance, on orders.	292
Reading, interpreting and making recommendations on radiographs of gastrointestinal and/or biliary tracts, or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	346
Participating in meetings of radiologists, surgeons and pathologists to discuss new developments, cases of interest and case problems in the field of gastrointestinal and biliary surgery and radiology.	352
Providing clinical training for radiology residents in radiographic study of the gastrointestinal and biliary tracts.	347
Planning and presenting lectures or case conferences on gastrointestinal and biliary tract radiology for radiology residents.	348
Planning and presenting lectures on gastrointestinal and biliary tract radiology for medical students.	349
Selecting gastrointestinal and biliary tract radiographic materials for use in case conference or lecture presentations or for inclusion in library.	310
Deciding on whether to enter suggested radiographs of gastrointestinal and biliary tracts into log book based on quality and educational value.	351

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
MUSCULO-SKELETAL SYSTEM	
Taking plain film radiographs of the skull and/or face of non-infant patient.	365
Taking plain film radiographs of the paranasal sinuses of a non-infant patient.	366
Taking plain film radiographs of the skull of infant patient.	491
Taking preliminary localization radiographs of foreign bodies in orbit or eye of non-infant patient.	367
Taking plain film radiographs of vertebral column of non-infant patient.	361
Taking plain film radiographs of vertebral column of infant patient.	492
Taking plain film radiographs of fingers, hand(s) or wrist(s) of non-infant patient.	355
Taking plain film radiographs of forearm and/or elbow joint of non-infant patient.	356
Taking plain film radiographs of humerus and/or shoulder girdle of non-infant patient.	357
Taking plain film radiographs of the upper extremities of infant patient.	493
Taking plain film radiographs of toes, foot and/or ankle joint of non-pediatric patient.	358
Taking plain film radiographs of leg(s), knee(s) and/or femur(s) of non-infant patient.	359
Taking plain film radiographs of the lower extremities of infant or pediatric patient.	496
Taking plain film radiographs of sternum, ribs and/or thoracic viscera of non-infant patient.	362

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
MUSCULO-SKELETAL SYSTEM (continued)	
Taking radiographs of neck, chest of infant patient.	494
Taking plain film radiographs of pelvis, hips and/or upper femora of non-infant patient.	360
Reading and interpreting radiographs for bone-age study.	449
Conducting positive contrast arthrography (especially of knee) of any patient.	436
Taking positive contrast arthrograms (especially of knee) of any patient.	377
Taking operative orthopedic radiographs of any patient (such as in hip pinning).	370
Reading, interpreting and making recommendations on orthopedic radiographs and/or arthrograms and related studies of bones and joints or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	437
Providing clinical training for radiology residents in orthopedic radiology and arthrography.	438
Deciding on and scheduling cleft palate radiological study for any patient.	333
Conducting a fluoroscopic and cineradiographic cleft palate study of any patient.	334
Providing technical assistance for laryngography or cleft palate study of any patient (or any similar fluoroscopic examination including spot filming and/or cineradiography).	380
Reading, interpreting and making recommendations on cineradiographic cleft palate studies; explaining opinions, making presentation, or dictating findings and recommendations.	335
Participating in meetings of physicians involved with arthritis to discuss new developments, cases of interest and case problems in the field.	324

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
NERVOUS SYSTEM	
Deciding on type of neuroradiologic procedure(s) to order for any patient in consultation with referring physician and/or neurologist.	396
Conducting cerebral angiography of any patient.	397
Conducting retrograde venography of the internal jugular veins, posterior fossa dural sinus system and/or orbit of any patient.	427
Conducting orbital and/or cavernous sinus venography of any patient by frontal vein route.	428
Taking cerebral angiograms or venograms of any patient.	504
Conducting pneumoencephalography of any patient.	398
Cooperating with surgeon in conducting brain ventriculography of any patient.	399
Taking pneumoencephalograms or brain ventriculograms of any patient.	505
Conducting positive contrast posterior fossa myelography of any patient.	430
Taking positive contrast spinal or posterior fossa myelograms of any patient.	506
Conducting positive contrast myelography of any patient.	400
Conducting air contrast myelograms of any patient.	401
Taking air or gas contrast myelograms of any patient.	508
Conducting discography of any patient.	431
Taking diskograms of any patient.	507

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
NERVOUS SYSTEM (continued)	
Directing skull tomography of any patient.	432
Taking tomograms of non-infant patient.	374
Directing computerized transverse axial tomography of the skull and brain of any patient.	440
Taking computerized transverse axial tomographic (C.T.T.) scans of any patient.	526
Conducting selective spinal cord angiography of any patient.	429
Taking spinal cord angiograms of any patient.	509
Reading, interpreting and making recommendations on neuroradiographic materials, and/or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	404
Retrieving, displaying and making photographs, printouts and/or magnetic tape records of computerized transverse axial tomographic (C.T.T.) scans.	527
Participating in meetings of radiologists, surgeons and neurologists to discuss new developments, cases of interest and case problems in the fields of neurology, surgery and neuroradiology.	408
Providing clinical training for radiology residents in neuroradiology procedures.	405
Planning and presenting lectures or case conferences on neuroradiology for radiology residents.	407

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
REPRODUCTIVE AND URINARY SYSTEMS	
Breasts	
Conducting mammographic examination of any patient's breasts.	402
Taking mammograms (radiography or xeroradiography) of non-infant patient.	368
Reading, interpreting and making recommendations on mammographic materials, or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	403
Providing clinical training for radiology residents in mammography procedures.	406
Reproductive System and Fetus	
Deciding on type of gynecological radiographic procedures to order for non-pediatric female patient in consultation with referring physician.	421
Conducting vaginography of pediatric patient for intersex condition.	447
Taking genitograms or fistulograms of any patient for intersex, external fistula or sinus tract examination.	503
Conducting pelvic pneumography and/or pangynecography of non-infant female patient.	4
Conducting hysterography or hysterosalpingography of a non-pediatric female patient.	5
Taking pelvic pneumograms and/or hysterosalpinograms of non-pediatric female patient.	465

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

REPRODUCTIVE AND URINARY SYSTEMS

Reproductive System and Fetus (continued)

Category and Abbreviated Task Name	Task Code No.
Deciding on type of obstetrical radiographic procedures to order for pregnant patient in consultation with referring obstetrician.	418
Taking radiographs of a pregnant patient's pelvis for Colcher-Sussman pelvimetry.	468
Calculating and interpreting radiographic pelvimetry using Colcher-Sussman technique.	419
Conducting intrauterine fetal radiography for intrauterine transfusion in consultation with obstetrician.	420
Taking radiographs of a pregnant patient's uterus for intrauterine transfusion.	467
Taking radiographs of a pregnant patient's abdomen for fetography, amniography, placentography.	466
Reading, interpreting and making recommendations on obstetrical and/or gynecological radiographic studies and related material or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	422
Participating in meetings of radiologists, obstetricians, and gynecologists to discuss new developments, cases of interest and case problems of mutual interest.	423
Providing clinical training for radiology residents in obstetrical and gynecological radiographic procedures.	424
Planning and presenting lectures or case conferences on obstetrical and gynecological radiology for radiology residents.	425

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

REPRODUCTIVE AND URINARY SYSTEMS

Urinary System, Peritoneum

Category and Abbreviated Task Name	Task Code No.
Deciding on type of urographic procedure(s) to order for any patient in consultation with referring physician and/or specialists.	311
Conducting intravenous excretory urography (IVP) and inferior vena cavography of pediatric patient.	444
Taking excretory intravenous inferior vena cavograms and urograms of pediatric patient.	502
Conducting intravenous pyelography (IVP) examination of any non-pediatric patient.	312
Taking intravenous pyelograms and urograms of non-pediatric patient.	387
Directing nephrotomography of any patient.	313
Taking infusion nephrotomograms of any patient.	388
Conducting percutaneous antegrade pyelography of any non-pediatric patient.	426
Performing renal cyst puncture and conducting related radiography of any patient.	315
Taking percutanous antegrade or renal cyst pyelograms of non-infant patient.	389
Assisting in renal biopsy of any patient by using fluoroscopy to place biopsy needle.	316
Conducting retrograde voiding cystourethrography of pediatric patient.	445
Taking cystograms and voiding cystourethrograms of any patient.	390
Taking retrograde pyelograms and ureterograms of non-pediatric patient.	463

Category and Abbreviated Task Name	Task Code No.
REPRODUCTIVE AND URINARY SYSTEMS	
Urinary System, Peritoneum (continued)	
Conducting percutaneous peritoneography/inguinal herniography of pediatric patient.	448
Taking percutaneous peritoneograms/herniograms of pediatric patient.	501
Taking intravisceral or isolated operating room radiographs of any patient.	372
Reading, interpreting and making recommendations on urographic materials, or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	317
Participating in meetings of radiologists, urologists and nephrologists to discuss new developments, cases of interest, and case problems in the fields of urology and urography.	323
Providing clinical training for radiology residents in urographic procedures.	318
Catheterizing any male or female patient's urethra with retention balloon catheter.	181
Catheterizing any female urethra as ordered.	143
Obtaining a clean catch urine specimen from any patient and preparing for laboratory.	98
Obtaining urine specimen on orders.	155
Testing a urine sample by tablet or dipstick method and recording.	95

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
RESPIRATORY SYSTEM	
Deciding on type of respiratory radiographic examination(s) to order for any patient in consultation with referring physician and/or specialists.	409
Conducting choanal radiography of pediatric patient.	442
Taking radiographs for choanal atresia study of infant patient.	497
Conducting laryngography of any non-pediatric patient.	412
Taking radiographs of anterior portion of the neck of non-infant patient.	364
Conducting fluoroscopic inspiration-expiration examination of pediatric patient.	457
Conducting bronchoscopy and related biopsy and secretion sampling of any non-pediatric patient.	410
Conducting aspiration or tissue needle biopsy of the lung of any non-pediatric patient.	413
Carrying out radiologic technology for bronchoscopy or needle lung biopsy of a non-pediatric patient.	379
Conducting bronchography of pediatric patient in consultation with pediatrician(s) and anesthesiologist.	443
Taking bronchograms of a pediatric patient.	498
Conducting bronchography of any non-pediatric patient.	411
Taking bronchograms of a non-pediatric patient.	378
Directing respiratory tract tomography.	20
Reading, interpreting and making recommendations on radiographic materials involving bronchi, lungs, trachea and/or larynx, or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	414

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
RESPIRATORY SYSTEM (continued)	
Participating in meetings with pulmonary specialists, surgeons and pathologists to discuss new developments, cases of interest, and case problems in pulmonary medicine, surgical pathology and thoracic surgery.	337
Providing clinical training for radiology residents in radiographic procedures of lungs, bronchi, trachea and/or larynx.	416
Planning and presenting lectures or case conferences on pulmonary, tracheal, bronchial and laryngeal radiology for radiology residents.	415
Planning and presenting lectures on pulmonary, bronchial, tracheal and laryngeal radiography for medical students.	417
Preparing specimens such as extravascular body fluids, washings, cell and/or tissue biopsies for transportation to laboratory.	65
Delivering prepared specimens or cultures to lab or incubator.	137
GENERAL TASKS n.e.c.*	
Conducting radiography of external fistula or sinus tract of any patient.	446
Taking genitograms or fistulograms of any patient for intersex, external fistula or sinus tract examination.	503**
Taking operating room radiographs for opaque foreign body search.	373

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* N.e.c.: Not elsewhere classified.

** Listed earlier in this section.

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
GENERAL TASKS n.e.c. (continued)	
Providing technical assistance for an examination of any patient requiring fluoroscopic control and spot filming.	464
Preparing, transporting, setting up and returning mobile portable radiography equipment for bedside radiography.	369
Reading, interpreting and making recommendations on routine radiographic materials; dictating findings and recommendations.	6
Deciding whether to order non-neurologic tomography for any patient or alternative studies and recommending technique in consultation with referring physician.	331
Taking tomograms of non-infant patient.	374**
Reading, interpreting and making recommendations on non-neurological tomograms or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	332
Deciding whether to order non-neurologic computerized transverse axial tomography for any patient and/or alternative studies in consultation with referring physician.	314
Directing computerized transverse axial tomography of the body of any patient.	488
Taking computerized transverse axial tomographic (C.T.T.) scans of any patient.	526**
Reading, interpreting and making recommendations on non-neurological computerized transverse axial tomographic scans of the body, and/or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	489
Deciding on type of pediatric radiographic examination(s) to order for pediatric patient in consultation with referring physician and/or pediatric specialist.	441

** Listed earlier in this section.

Category and Abbreviated Task Name	Task Code No.
GENERAL TASKS n.e.c. (continued)	
Reading, interpreting and making recommendations on radiographic and related studies of pediatric patients or giving opinions to clinician or co-workers; explaining opinions or dictating findings and recommendations.	458
Participating in meetings of radiologists, surgeons and pediatricians to discuss new developments, cases of interest, and case problems in the field of pediatric surgery and radiology.	459
Providing clinical training for radiology residents in pediatric radiography.	460
Planning and presenting lectures or case conferences on pediatric radiology for radiology residents.	461
Planning and presenting lectures on pediatric radiology for medical students.	462
Giving any patient general reassurance.	113
Reassuring any patient and/or accompanying adult about x-ray and/or fluoroscopy procedures.	73
Placing or making call and delivering non-medical message at patient or co-worker's request.	302
Explaining to any out-patient or accompanying adult proper at-home procedures to follow prior to coming for radiographic or fluoroscopic examination.	74
Escorting adult out-patients to and/or from dressing rooms, treatment rooms and/or waiting areas.	282
Assisting patient to or from wheelchair, stretcher, bed, or table and/or transporting patient to designated area.	190
On orders, placing order for specific dietetic meal; picking up, delivering, and feeding patient if so decided.	287
Bottle feeding a baby with pre-prepared formula.	289

TASKS LISTED BY SYSTEM OR AREA OF THE BODY (continued)

Category and Abbreviated Task Name	Task Code No.
GENERAL TASKS n.e.c. (continued)	
Diapering a baby.	301
Mummying or wrapping an infant or young pediatric patient.	490
Restraining any patient.	243
Having any patient and materials prepared for special procedure and readying patient for examination.	193
Reporting observed symptoms and concerns of any patient to physician or staff member.	138
Assisting physician or co-worker in special examination or treatment procedures.	153
Taking and reporting temperature of any non-pediatric patient with oral thermometer on orders.	291
Taking and recording vital signs (temperature, pulse, respiration and blood pressure) of any patient.	199
Arranging, measuring and recording food intake and excretory output as ordered.	303
Taking an electrocardiogram of any patient as ordered or determined.	262
Deciding whether to call staff person to evaluate whether unusual EKG reading is artifact, or calling physician in case of serious patient distress.	271
On orders deciding whether wound of any patient needing change of dressing needs attention of RN; changing simple dry dressing or reinforcing wet dressing.	283
Irrigating, cleaning, dressing or redressing any patient's wound, burn or opening for catheter as ordered.	156
Setting up and using suction machine to clear airway or to assist with gastric lavage.	182

Category and Abbreviated Task Name	Task Code No.
GENERAL TASKS n.e.c. (continued)	
Administering medication orally to any patient according to MD's orders after having quantity checked.	198
Administering medication orally to any patient according to MD's orders.	298
Administering subcutaneous or intramuscular injection for any patient according to MD's orders after having quantity checked.	133
Administering subcutaneous or intramuscular injection for any patient according to MD's orders.	299
Administering test for allergy to iodine based contrast medium of any patient.	19
Providing emergency care for any patient having adverse reaction to radiographic contrast medium,procedure, or accident.	77
Providing first aid in x-ray department emergency.	296
Administering oxygen from portable or piped outlet unit using oronasal or nasal mask according to MD's orders.	185

TASKS LISTED BY TASK FUNCTION*

Category and Abbreviated Task Name	Task Code No.
RADIOLOGIST "CONSULTATION" TASKS	
Deciding on type of non-neurologic angiography procedure to order for any patient in consultation with referring physician, surgeon, and/or other specialist.	469
Deciding whether to order lymphangiography of any patient or alternative studies and recommending technique, in consultation with referring physician.	328
Deciding on type of gastrointestinal and/or biliary radiographic examinations to order for any patient in consultation with referring physician and/or specialists.	339
Deciding on and scheduling cleft palate radiological study for any patient.	333
Deciding on type of neuroradiologic procedure(s) to order for any patient in consultation with referring physician and/or neurologist.	396
Deciding on type of gynecological radiographic procedures to order for non-pediatric female patient in consultation with referring physician.	421
Deciding on type of obstetrical radiographic procedures to order for pregnant patient in consultation with referring obstetrician.	418
Deciding on type of urographic procedure(s) to order for any patient in consultation with referring physician and/or specialists.	311
Deciding on type of respiratory radiographic examination(s) to order for any patient in consultation with referring physician and/or specialists.	409
Deciding on type of pediatric radiographic examination(s) to order for pediatric patient in consultation with referring physician and/or pediatric specialist.	441

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* All tasks in the Report are covered in this section.

RADIOLOGIST "CONSULTATION" TASKS (continued)

Category and Abbreviated Task Name	Task Code No.
Deciding whether to order non-neurologic tomography for any patient or alternative studies,and recommending technique in consultation with referring physician.	331
Deciding whether to order non-neurologic computerized transverse axial tomography for any patient and/or alternative studies in consultation with referring physician.	314

RADIOLOGIST "HANDS ON" PROCEDURE TASKS

Angiography

Category and Abbreviated Task Name	Task Code No.
Conducting lymphangiography of any patient.	329
Conducting peripheral arteriography of any patient by percutaneous selective catheterization or direct needle puncture.	470
Conducting ascending or descending venography of lower extremities of any patient by direct needle puncture.	471
Conducting catheter thoracic aortography of any patient.	472
Conducting catheter abdominal aortography and/or selective visceral arteriography of any patient.	473
Conducting percutaneous translumbar abdominal aortography of any patient.	474
Conducting percutaneous splenoportography of any patient.	475
Conducting selective pelvic arteriography of non-pediatric gravid or nongravid female patient.	476
Conducting catheter pulmonary angiography of any patient.	477
Conducting selective bronchial arteriography of any patient.	478

Category and Abbreviated Task Name	Task Code No.
RADIOLOGIST "HANDS ON" PROCEDURE TASKS	
Angiography (continued)	
Conducting selective thyroid angiography of any patient.	479
Conducting selective subclavian arteriography of any non-pediatric patient to evaluate thoracic outlet syndrome.	480
Conducting intravenous angiocardiography of any patient by percutaneous selective catheterization or direct needle puncture.	481
Conducting catheter vena cavography and/or selective renal or adrenal venography of any non-infant patient.	482
Conducting percutaneous coronary arteriography and/or left ventriculography of any patient.	483
Gastrointestinal and Biliary	
Conducting a radiographic barium swallow study of esophagus of any non-pediatric patient.	2
Conducting a radiographic barium study of upper gastrointestinal tract of any non-pediatric patient.	3
Conducting a radiographic air contrast study of stomach of any non-pediatric patient.	395
Conducting small bowel enema radiographic study of any non-pediatric patient.	341
Conducting hypotonic duodenography of any non-pediatric patient.	340
Conducting a radiographic barium enema study of lower gastrointestinal tract of any non-pediatric patient.	1

TASKS LISTED BY TASK FUNCTION (continued)

RADIOLOGIST "HANDS ON" PROCEDURE TASKS

Gastrointestinal and Biliary (continued)

Category and Abbreviated Task Name	Task Code No.
Evaluating oral cholecystograms or oral cholangiograms; conducting fluoroscopy and/or post-fatty meal, post-evacuation study of any non-infant patient involved if so decided.	342
Conducting intravenous cholangiography and cholecystography (IVC) of any non-infant patient.	344
Conducting percutaneous (transhepatic) cholangiography of any non-pediatric patient.	343
Conducting T-tube cholangiography of any patient.	345

Neuroradiology

Category and Abbreviated Task Name	Task Code No.
Conducting cerebral angiography of any patient.	397
Conducting retrograde venography of the internal jugular veins, posterior fossa dural sinus system and/or orbit of any patient.	427
Conducting orbital and/or cavernous sinus venography of any patient by frontal vein route.	428
Conducting pneumoencephalography of any patient.	398
Cooperating with surgeon in conducting brain ventriculography of any patient.	399
Conducting positive contrast posterior fossa myelography of any patient.	430
Directing skull tomography of any patient.	432
Directing computerized transverse axial tomography of the skull and brain of any patient.	440

Category and Abbreviated Task Name	Task Code No.
RADIOLOGIST "HANDS ON" PROCEDURE TASKS	
Neuroradiology (continued)	
Conducting selective spinal cord angiography of any patient.	429
Conducting positive contrast myelography of any patient.	400
Conducting air contrast myelography of any patient.	401
Conducting discography of any patient.	431
Pediatrics	
Conducting choanal radiography of pediatric patient.	442
Conducting fluoroscopic inspiration-expiration examination of pediatric patient.	457
Conducting bronchography of pediatric patient in consultation with pediatrician(s) and anesthesiologist.	443
Removing foreign object from pediatric upper esophagus under fluoroscopic control.	451
Conducting esophageal radiography of pediatric patient.	452
Conducting radiographic barium study of upper gastrointestinal tract of pediatric patient.	453
Conducting a radiographic barium enema study of lower gastrointestinal tract of pediatric patient.	454
Conducting defecography of pediatric patient.	455
Conducting diagnosis and hydrostatic reduction of intussusception of pediatric patient.	456

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
RADIOLOGIST "HANDS ON" PROCEDURE TASKS	
Pediatrics (continued)	
Conducting intravenous excretory urography (IVP) and inferior vena cavography of pediatric patient.	444
Conducting retrograde voiding cystourethrography of pediatric patient.	445
Conducting vaginography of pediatric patient for intersex condition.	447
Conducting percutaneous peritoneography/inguinal herniography of pediatric patient.	448
Respiratory	
Conducting laryngography of any non-pediatric patient.	412
Conducting bronchoscopy and related biopsy and secretion sampling of any non-pediatric patient.	410
Conducting bronchography of any non-pediatric patient.	411
Conducting aspiration or tissue needle biopsy of the lung of any non-pediatric patient.	413
Directing respiratory tract tomography.	20
Urography	
Conducting intravenous pyelography (IVP) examination of any non-pediatric patient.	312

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
RADIOLOGIST "HANDS ON" PROCEDURE TASKS	
Urography (continued)	
Conducting percutaneous antegrade pyelography of any non-pediatric patient.	426
Performing renal cyst puncture and conducting related radiography of any patient.	315
Assisting in renal biopsy of any patient by using fluoroscopy to place biopsy needle.	316
Directing nephrotomography of any patient.	313
Obstetrics-Gynecology	
Conducting intrauterine fetal radiography for intrauterine transfusion in consultation with obstetrician.	420
Conducting pelvic pneumography and/or pangynecography of non-infant female patient.	4
Conducting hysterography or hysterosalpingography of a non-pediatric female patient.	5
Procedure Tasks n.e.c.	
Conducting a fluoroscopic and cineradiographic cleft palate study of any patient.	334
Conducting sialography of any patient.	433
Conducting mammographic examination of any patient's breasts.	402

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
RADIOLOGIST "HANDS ON" PROCEDURE TASKS	
Procedure Tasks n.e.c. (continued)	
Conducting positive contrast arthrography (especially of knee) of any patient.	436
Conducting radiography of external fistula or sinus tract of any patient.	446
Directing computerized transverse axial tomography of the body of any patient.	488
RADIOLOGIST "READING AND INTERPRETING" TASKS	
Reading, interpreting and making recommendations on non-neurologic angiographic and related studies and/or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	484
Reading, interpreting and making recommendations on lymphangiograms, or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	330
Reading, interpreting and making recommendations on sialography and related materials or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	434
Reading, interpreting and making recommendations on radiographs of gastrointestinal and/or biliary tracts, or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	346
Reading, interpreting and making recommendations on orthopedic radiographs and/or arthrograms and related studies of bones and joints or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	437

Category and Abbreviated Task Name	Task Code No.
RADIOLOGIST "READING AND INTERPRETING" TASKS (continued)	
Reading, interpreting and making recommendations on cineradiographic cleft palate studies; explaining opinions, making presentation, or dictating findings and recommendations.	335
Reading, interpreting and making recommendations on neuroradiographic materials, and/or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	404
Reading and interpreting radiographs for bone-age study.	449
Evaluating plain films of pediatric gastrointestinal tract to localize obstructions and/or foreign bodies.	450
Reading, interpreting and making recommendations on radiographic and related studies of pediatric patients or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	458
Reading, interpreting and making recommendations on mammographic materials, or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	403
Calculating and interpreting radiographic pelvimetry using Colcher-Sussman technique.	419
Reading, interpreting and making recommendations on obstetrical and/or gynecological radiographic studies and related material or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	422
Reading, interpreting and making recommendations on urographic materials, or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	317
Reading, interpreting and making recommendations on radiographic materials involving bronchi, lungs, trachea and/or larynx, or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	414

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
RADIOLOGIST "READING AND INTERPRETING" TASKS (continued)	
Reading, interpreting and making recommendations on non-neurological tomograms or giving opinions to co-workers; explaining opinions or dictating findings and recommendations.	332
Reading, interpreting and making recommendations on non-neurological computerized transverse axial tomographic scans of the body, and/or giving opinions to clinicians or co-workers; explaining opinions or dictating findings and recommendations.	489
Reading, interpreting and making recommendations on routine radiographic materials; dictating findings and recommendations.	6
RADIOLOGIST "PROFESSIONAL MEETING" TASKS	
Participating in meetings of angiographers, vascular surgeons and cardiologists to discuss new developments, cases of interest, and case problems in the field of angiography, vascular and cardiovascular surgery.	485
Participating in meetings of radiologists, surgeons and pathologists to discuss new developments, cases of interest and case problems in the field of gastrointestinal and biliary surgery and radiology.	352
Participating in meetings of physicians involved with arthritis to discuss new developments, cases of interest and case problems in the field.	324
Participating in meetings of physicians involved with plastic surgery to discuss new developments, cases of interest, and case problems in the field.	338
Participating in meetings of radiologists, surgeons and neurologists to discuss new developments, cases of interest and case problems in the fields of neurology, surgery and neuroradiology.	408

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
RADIOLOGIST "PROFESSIONAL MEETING" TASKS (continued)	
Participating in meetings of radiologists, surgeons and pediatricians to discuss new developments, cases of interest, and case problems in the field of pediatric surgery and radiology.	459
Participating in meetings of radiologists, obstetricians, and gynecologists to discuss new developments, cases of interest and cases problems of mutual interest.	423
Participating in meetings of radiologists, urologists and nephrologists to discuss new developments, cases of interest, and case problems in the fields of urology and urography.	323
Participating in meetings with pulmonary specialists, surgeons and pathologists to discuss new developments, cases of interest, and case problems in pulmonary medicine, surgical pathology and thoracic surgery.	337
Participating in meetings of radiologists, surgeons and pathologists to discuss new developments, cases of interest and case problems in the fields of surgery and radiology.	325
TECHNOLOGIST "PLAIN FILM" EXAMINATION TASKS	
Non-Contrast Studies	
Taking plain film radiographs of fingers, hand(s) or wrist(s) of non-infant patient.	355
Taking plain film radiographs of forearm and/or elbow joint of non-infant patient.	356
Taking plain film radiographs of humerus and/or shoulder girdle of non-infant patient.	357

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
TECHNOLOGIST "PLAIN FILM" EXAMINATION TASKS	
Non-Contrast Studies (continued)	
Taking plain film radiographs of the upper extremities of infant patient.	493
Taking plain film radiographs of the skull and/or face of non-infant patient.	365
Taking plain film radiographs of the paranasal sinuses of a non-infant patient.	366
Taking preliminary localization radiographs of foreign bodies in orbit or eye of non-infant patient.	367
Taking plain film radiographs of the skull of infant patient.	491
Taking plain film radiographs of vertebral column of non-infant patient.	361
Taking plain film radiographs of vertebral column of infant patient.	492
Taking plain film radiographs of abdominal contents of non-infant patient.	363
Taking plain film radiographs of abdomen of infant patient.	495
Taking plain film radiographs of toes, foot and/or ankle joint of non-pediatric patient.	358
Taking plain film radiographs of leg(s), knee(s) and/or femur(s) of non-infant patient.	359
Taking plain film radiographs of pelvis, hips and/or upper femora of non-infant patient.	360
Taking plain film radiographs of the lower extremities of infant or pediatric patient.	496

Category and Abbreviated Task Name	Task Code No.
TECHNOLOGIST "PLAIN FILM" EXAMINATION TASKS	
Specialized "Plain Film" Studies	
Taking mammograms (radiography or xeroradiography) of non-infant patient.	368
Taking tomograms of non-infant patient.	374
Taking radiographs of a pregnant patient's pelvis for Colcher-Sussman pelvimetry.	468
Taking operative orthopedic radiographs of any patient (such as in hip pinning).	370
Taking operative cholangiograms, pancreatograms or similar operative radiographs of any patient.	371
Taking intravisceral or isolated operating room radiographs of any patient.	372
Taking operating room radiographs for opaque foreign body search.	373
TECHNOLOGIST CONTRAST EXAMINATION TASKS	
Routine Contrast Studies	
Taking radiographs of neck, chest of infant patient.	494
Taking radiographs of anterior portion of the neck of non-infant patient.	364
Taking plain film radiographs of sternum, ribs and/or thoracic viscera of non-infant patient.	362

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
TECHNOLOGIST CONTRAST EXAMINATION TASKS	
Angiography	
Taking lymphangiograms or lymphadenograms of any patient.	376
Taking cerebral angiograms or venograms of any patient.	504
Taking spinal cord angiograms of any patient.	509
Taking peripheral angiograms of any patient (after percutaneous needle or catheter entry, translumbar puncture, ascending or descending venous entry).	510
Taking catheter thoracic and/or abdominal aortograms of any patient, and/or selective visceral arteriograms (bronchial or abdominal).	511
Taking selective pelvic angiograms of non-pediatric gravid or nongravid female patient.	512
Taking intravenous angiocardiograms of any patient.	513
Taking selective thyroid angiograms of any patient.	514
Taking catheter inferior vena cavograms and/or renal or adrenal venograms of non-infant patient.	515
Taking percutaneous splenoportograms of any patient.	516
Taking selective subclavian arteriograms of non-pediatric patient for thoracic outlet syndrome evaluation.	517
Taking selective pulmonary angiograms or selective angiocardiograms of any patient.	518
Taking percutaneous coronary arteriograms and/or left ventriculograms of any patient.	519

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
TECHNOLOGIST CONTRAST EXAMINATION TASKS	
Neuro-Skull Studies, Myelography, Diskography	
Taking pneumoencephalograms or brain ventriculograms of any patient.	505
Taking positive contrast spinal or posterior fossa myelograms of any patient.	506
Taking air or gas contrast myelograms of any patient.	508
Taking diskograms of any patient.	507
Intravenous Injection or Infusion Studies	
Taking intravenous cholangiograms and cholecystograms of non-infant patient.	385
Taking intravenous pyelograms and urograms of non-pediatric patient.	387
Taking infusion nephrotomograms of any patient.	388
Taking excretory intravenous inferior vena cavograms and urograms of pediatric patient.	502
Studies With Oral Ingestion of Contrast	
Taking upper GI radiographs of non-pediatric patient.	381
Taking upper GI radiographs of pediatric patient.	499
Taking oral cholecystograms and cholangiograms of non-infant patient.	384

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
TECHNOLOGIST CONTRAST EXAMINATION TASKS	
Instillation, Intubation, Enema Studies	
Taking sialograms of any patient.	375
Taking radiographs for choanal atresia study of infant patient.	497
Providing technical assistance for larynogography or cleft palate study of any patient (or any similar fluoroscopic examination including spot filming and/or cineradiography).	380
Taking bronchograms of a non-pediatric patient.	378
Taking bronchograms of a pediatric patient.	498
Taking small intestine intubation radiographs of a non-pediatric patient.	382
Taking percutaneous or T-tube cholangiograms of non-infant patient.	386
Taking retrograde pyelograms and ureterograms of non-pediatric patient.	463
Taking cystograms and voiding cystourethrograms of any patient.	390
Taking pelvic pneumograms and/or hysterosalpingograms of non-pediatric female patient.	465
Taking genitograms or fistulograms of any patient for intersex, external fistula or sinus tract examination.	503
Taking barium enema radiographs of non-pediatric patient.	383
Taking barium enema, intussusception or defecography radiographs of pediatric patient.	500

Category and Abbreviated Task Name	Task Code No.
TECHNOLOGIST CONTRAST EXAMINATION TASKS	
Direct Puncture or Injection Studies	
Taking positive contrast arthrograms (especially of knee) of any patient.	377
Carrying out radiologic technology for bronchoscopy or needle lung biopsy of a non-pediatric patient.	379
Taking percutaneous antegrade or renal cyst pyelograms of non-infant patient.	389
Taking radiographs of a pregnant patient's abdomen for fetography, amniography, placentography.	466
Taking radiographs of a pregnant patient's uterus for intrauterine transfusion.	467
Taking percutaneous peritoneograms/herniograms of pediatric patient.	501
TECHNOLOGIST EXAMINATION TASKS n.e.c.	
Taking computerized transverse axial tomographic (C.T.T.) scans of any patient.	526
Providing technical assistance for an examination of any patient requiring fluoroscopic control and spot filming.	464
Preparing, transporting, setting up and returning mobile portable radiography equipment for bedside radiography.	369

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
PROCESSING AND RELATED TASKS	
Processing	
Preparing radiographic subtraction prints.	275
Applying print coater to photographs.	319
Processing exposed x-ray film in automatic processor.	69
Processing exposed x-ray film manually.	71
Processing exposed Polaroid x-ray film with Polaroid automatic processing equipment.	267
Retrieving, displaying and making photographs, printouts and/or magnetic tape records of computerized transverse axial tomographic (C.T.T.) scans.	527
Maintenance	
Cleaning, inspecting and readying automatic x-ray film processor(s) for use.	273
Inspecting, cleaning and readying x-ray film hand processing equipment for use.	70
Making minor adjustments or repair on automatic x-ray film processor.	276
Inspecting and cleaning intensifying screens in cassette holders.	167
Loading x-ray film cassette(s), nonscreen film holder(s), box(es), and/or roll film cartridges.	72
Loading empty cassette with Polaroid x-ray film.	269

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
PROCESSING AND RELATED TASKS	
Quality Assurance	
Designing, maintaining, evaluating darkroom and/or film processor monitoring program in diagnostic radiology.	542
Monitoring and evaluating x-ray film processors.	543
Determining exposure characteristics of x-ray and/or dosimetric films.	544
Checking cassettes for proper film-screen contact.	187
X-RAY EQUIPMENT QUALITY CONTROL TASKS	
Equipment Testing, Calibration	
Designing, maintaining, evaluating calibration and/or dose monitoring program in diagnostic radiology.	528
Calibrating diagnostic x-ray test, survey, or measuring instruments.	556
Checking x-ray field limitation, x-ray receptor and light field alignment, minimum TOD, TFD and field size indicators for diagnostic x-ray equipment.	529
Checking fluoroscopic and spot film x-ray field limitation, x-ray field and image receptor alignment, maximum TID, minimum TOD, and other requirements.	530
Testing whether diagnostic x-ray tube overload protection and/or effective focal spot size meet acceptable standards.	531
Checking and/or performing direct calibration tests of diagnostic radiography equipment exposure timers.	532
Checking accuracy of x-ray machine timers (except phototimers) with spinning top test.	173

X-RAY EQUIPMENT QUALITY CONTROL TASKS

Equipment Testing, Calibration (continued)

Category and Abbreviated Task Name	Task Code No.
Checking automatic exposure termination of diagnostic radiography equipment.	533
Checking calibration and accuracy of C.T.T. equipment by making test scans.	525
Performing calibration tests of kVp, mA, mAs, exposure rates, reproducibility on diagnostic radiography equipment using direct measuring instruments and/or radiographic comparisons.	535
Performing penetrometer calibration test of kVp or mA selectors of x-ray machine output.	175
Ordering or approving changes in technical factor selector settings to compensate for a change in quality of x-ray machine output.	439
Preparing or changing technique charts for specific x-ray and fluoroscopic equipment on orders.	147
Checking fluoroscopic automatic brightness control system and/or focus, resolution and distortion of the optical system.	540
Checking diagnostic tomography x-ray equipment for mechanical operation, fulcrum position, resolution, exposure uniformity and/or grid alignment.	537
Estimating HVL and checking adequacy of filtration of diagnostic x-ray equipment.	538
Checking bucky grid alignment and/or centering in diagnostic radiography equipment.	539
Providing visual and/or manual inspection of diagnostic radiography system.	536
Providing visual and radiographic or fluoroscopic inspection of personnel shielding devices such as leaded gloves, aprons, sheets, gonadal shields.	534

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
X-RAY EQUIPMENT QUALITY CONTROL TASKS	
Maintenance	
Inspecting, checking, preparing xeroradiography equipment for use.	192
Checking, preparing fluoroscope controls (and phototimer).	178
Preparing computerized transverse axial tomography (C.T.T.) equipment for use.	523
Shutting down computerized transverse axial scanning equipment.	8
Providing preventive maintenance for display tube surface, camera, disc and/or tape drive units, and/or scanning assembly (especially water-using head box assembly) of computerized transverse axial tomography (C.T.T.) equipment.	524
RADIATION PROTECTION, MONITORING TASKS	
Designing, maintaining, evaluating radiation protection and monitoring programs in diagnostic radiology.	546
Determining primary and secondary structural shielding required for diagnostic x-ray installations.	547
Checking the leakage radiation rate from the source assembly of diagnostic x-ray equipment.	549
Checking maximum entrance exposure rate and primary barrier transmitted radiation rate for fluoroscopic equipment.	548
Conducting protection survey of stray radiation within diagnostic x-ray installation and transmission across primary and secondary protective barriers.	550
Monitoring patient exposure rates for routine diagnostic x-ray procedures.	545

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
RADIATION PROTECTION, MONITORING TASKS (continued)	
Preparing personnel radiation monitoring dosimetric film or TLD badges and distributing.	551
Participating in monitoring of personal exposure to radiation by periodically turning in and replacing film strip in badge worn by performer.	280
Participating in monitoring of personal exposure to radiation by periodically turning in and replacing film strip in badge; evaluating posted exposure listings.	327
Collecting and/or distributing personnel monitoring dosimetric badge inserts and preparing for outside or in-house processing and reading.	552
Reading and recording exposure from personnel monitoring film or thermoluminescent dosimeters.	553
Entering, evaluating occupational radiation exposure data and initiating action on dangerous levels.	554
Investigating reasons for reported high occupational radiation exposure and initiating remediation.	555
PATIENT CARE TASKS	
General Care	
Giving any patient general reassurance.	113
Reassuring any patient and/or accompanying adult about x-ray and/or fluoroscopy procedures.	73
Placing or making call and delivering non-medical message at patient's or co-worker's request.	302

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
PATIENT CARE TASKS	
General Care (continued)	
Explaining to any out-patient or accompanying adult proper at-home procedures to follow prior to coming for radiographic or fluoroscopic examination.	74
Escorting adult out-patients to and/or from dressing rooms, treatment rooms and/or waiting areas.	282
Assisting patient to or from wheelchair, stretcher, bed, or table and/or transporting patient to designated area.	190
On orders, placing order for specific dietetic meal; picking up, delivering, and feeding patient if so decided.	287
Bottle feeding a baby with pre-prepared formula.	289
Diapering a baby.	301
Mummying or wrapping an infant or young pediatric patient.	490
Restraining any patient.	243
Having any patient and materials prepared for special procedure and readying patient for examination.	193
Reporting observed symptoms and concerns of any patient to physician or staff member.	138
Assisting physician or co-worker in special examination or treatment procedures.	153
Symptom Monitoring	
Taking and reporting temperature of any non-pediatric patient with oral thermometer on orders.	291
Taking and recording vital signs (temperature, pulse, respiration and blood pressure) of any patient.	199

Category and Abbreviated Task Name	Task Code No.
PATIENT CARE TASKS	
Symptom Monitoring (continued)	
Arranging, measuring and recording food intake and excretory output as ordered.	303
Obtaining and examining fresh stool from any patient and reporting unusual or suspicious appearance, on orders.	292
Obtaining urine specimen on orders.	155
Obtaining a clean catch urine specimen from any patient and preparing for laboratory.	98
Preparing any patient and attaching electrodes for electrocardiogram monitoring.	520
Setting up and monitoring any patient's electrocardiogram during special procedure.	308
Taking an electrocardiogram of any patient as ordered or determined.	262
Deciding whether to call staff person to evaluate whether unusual EKG reading is artifact, or calling physician in case of serious patient distress.	271
Introductory Procedures, First Aid	
Administering test for allergy to iodine based contrast medium of any patient.	19
Providing emergency care for any patient having adverse reaction to radiographic contrast medium, procedure, or accident.	77
Providing first aid in x-ray department emergency.	296

PATIENT CARE TASKS

Introductory Procedures, First Aid (continued)

Category and Abbreviated Task Name	Task Code No.
Administering oxygen from portable or piped outlet unit using oronasal or nasal mask according to MD's orders.	185
Setting up and using suction machine to clear airway or to assist with gastric lavage.	182
Changing any patient's colostomy bag on orders.	290
Catheterizing any female urethra as ordered.	143
Catheterizing any male or female patient's urethra with retention balloon catheter.	181
On orders deciding whether wound of any patient needing change of dressing needs attention of RN; changing simple dry dressing or reinforcing wet dressing.	283
Irrigating, cleaning, dressing or redressing any patient's wound, burn or opening for catheter as ordered.	156
Applying digital or manual pressure to any patient's arterial or venous puncture site as ordered.	521
Applying pressure dressing to arterial or venous puncture site as ordered.	522
Removing any patient's sutures.	33
Administering medication orally to any patient according to MD's orders after having quantity checked.	198
Administering medication orally to any patient according to MD's orders.	298
Administering subcutaneous or intramuscular injection for any patient according to MD's orders after having quantity checked.	133
Administering subcutaneous or intramuscular injection for any patient according to MD's orders.	299
Drawing blood from any non-pediatric patient's vein on orders.	18

TASKS LISTED BY TASKS FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
MEDICAL MATERIALS-HANDLING TASKS	
Preparing blood samples for the laboratory.	180
Preparing specimens such as extravascular body fluids, washings, cell and/or tissue biopsies for transportation to laboratory.	65
Delivering prepared specimens or cultures to lab or incubator.	137
Testing a urine sample by tablet or dipstick method and recording.	95
Checking presence and functioning of oxygen and/or suction equipment, and amounts of oxygen.	284
Relocking equipment box(es) with breakaway lock.	184
Adding predetermined instruments and supplies to prepared procedure trays.	274
Preparing a hypodermic needle with injection dosage on orders.	260
Preparing materials or trays with medications and materials for special treatments or procedures according to standard orders.	80
Readying emergency cart.	304
Preparing barium sulfate contrast medium as ordered or for standard use.	79
HOUSEKEEPING TASKS	
Making up unoccupied bed or stretcher bed.	223
Cleaning an examination or treatment room after use.	135
Preparing treatment or examination equipment for sterilization in autoclave.	145
Using isolation and decontamination techniques to prepare examination or treatment room or area and clean up afterwards for patient with infectious or communicable condition.	166

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
INVENTORY AND RECORD KEEPING TASKS	
Ordering duplicate copies of forms, records, or documents.	264
Making photocopies of documents, collating, and stapling.	222
Filling out standard order for linen, picking up, folding and storing.	286
Filling out and delivering standard order for food items for department; picking up, and placing food for storage.	288
Obtaining and checking keypunch control card for serial cassette changer as ordered.	297
Checking for presence of emergency supplies in proper locations.	285
Checking for presence and condition of emergency supplies in proper locations; and restocking as needed.	227
Checking supplies and ordering non-drug materials needed by department.	76
Checking supply and ordering non-narcotic medicinals needed by department.	129
Checking and storing order for non-narcotic drugs and/or supplies.	136
Checking supply of narcotics or regulated drugs (or witnessing count); reordering, picking up, and restocking.	128
Filling out patient identification information on labels and forms in anticipation of need or as requested.	164
Filling out institutional report form (such as for cancellation) as ordered by MD.	163
Logging and/or tallying patient services and/or instructional case record materials for use in record keeping, billing or instruction.	134

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
INVENTORY AND RECORD KEEPING TASKS (continued)	
Checking and jacketing patient's radiographs, ultrasonograms, and/or C.T.T. scans with requisition sheets and prior diagnostic materials and placing for filing or interpreting.	78
Obtaining patient records for use in examination, procedure, treatment or conference.	354
Checking and submitting accumulated patients' treatment and medication check lists for in and out time stamps.	300
Checking in-patients' identity against patients' treatment and medication check lists; stamping arrival and departure times; attaching cards to patients indicating special conditions.	281
ADMINISTRATIVE TASKS	
Making assignments of staff to work areas, procedures, and/or MD's and/or vacations and lunch hours.	131
Preparing and adjusting schedules for patient procedures.	272
Assigning scheduled patients to procedure rooms in appropriate order.	277
Notifying ward or floor personnel to ready and transport in-patients who are scheduled for specific procedures at specific times.	279
Assigning subordinate and explaining assignment to transport patient, obtain materials or documents, or assist co-worker.	294
Checking on reasons for nonappearance of in-patients for examinations or treatment.	278
Requesting repair, replacement or other services of another hospital department orally and/or filling out requisition.	132

Category and Abbreviated Task Name	Task Code No.
EVALUATION, TEACHING AND RELATED TASKS	
Evaluation	
Providing technical quality review of "plain film" radiographs.	81
Comparing prior radiographic diagnoses with later pathology and/or autopsy reports and reporting discrepancies to appropriate radiologists.	394
Evaluating accepted and rejected radiographs to identify any technical problems with staff functioning, equipment, radiation protection.	541
Informally observing and evaluating patient care work of nursing and technologist staff in diagnostic radiography, and deciding whether training is needed.	158
Observing and evaluating work of radiologic technologists or students in diagnostic radiography, and deciding whether training is needed.	7
Participating in radiologists meeting to arrive at overall clinical and academic assessments of residents in radiology.	321
Formally evaluating subordinates' work by filling out descriptive and/or rating-scale evaluation forms.	306
Preparation of Instructional Materials	
Selecting gastrointestinal and biliary tract radiographic materials for use in case conference or lecture presentations or for inclusion in library.	310
Selecting and assembling radiographs and related case history information for use in case conference in diagnostic radiology.	391
Deciding on diagnostic radiology library acquisition of books, journals and radiographic materials; coding library acquisitions.	322
Reviewing and selecting current and/or inactive radiographs for instructional use.	393

TASKS LISTED BY TASK FUNCTION (continued)

EVALUATION, TEACHING AND RELATED TASKS

Clinical Training

Category and Abbreviated Task Name	Task Code No.
Providing clinical training for radiology residents in non-neurologic angiography.	486
Providing clinical training for radiology residents in lymph-angiography procedures.	336
Providing clinical training for radiology residents in ear, nose and throat radiography and sialography.	435
Providing clinical training for radiology residents in radiographic study of the gastrointestinal and biliary tracts.	347
Providing clinical training for radiology residents in orthopedic radiology and arthrography.	438
Providing clinical training for radiology residents in neuroradiology procedures.	405
Providing clinical training for radiology residents in pediatric radiography.	460
Providing clinical training for radiology residents in mammography procedures.	406
Providing clinical training for radiology residents in obstetrical and gynecological radiographic procedures.	424
Providing clinical training for radiology residents in urographic procedures.	318
Providing clinical training for radiology residents in radiographic procedures of lungs, bronchi, trachea and/or larynx.	416
Providing clinical training for staff in a diagnostic radiology department in quality assurance tests of equipment, in radiation protection procedures, and related maintenance.	558

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
EVALUATION, TEACHING AND RELATED TASKS	
Clinical Training (continued)	
Providing clinical training for radiologic technologists or students in radiographic technology.	82
Providing informal clinical training in patient care for non-MD personnel in diagnostic radiography.	305
Case Conferences, Lectures, Orientation	
Planning and presenting lectures or case conferences on non-neurologic angiography for radiology residents.	487
Planning and presenting lectures or case conferences on gastro-intestinal and biliary tract radiology for radiology residents.	348
Planning and presenting lectures on gastrointestinal and biliary tract radiology for medical students.	349
Planning and presenting lectures or case conferences on neuro-radiology for radiology residents.	407
Planning and presenting lectures or case conferences on pediatric radiology for radiology residents.	461
Planning and presenting lectures on pediatric radiology for medical students.	462
Planning and presenting lectures or case conferences on obstetrical and gynecological radiology for radiology residents.	425
Planning and presenting lectures or case conferences on pulmonary, tracheal, bronchial and laryngeal radiology for radiology residents.	415
Planning and presenting lectures on pulmonary, bronchial, tracheal and laryngeal radiography for medical students.	417

Category and Abbreviated Task Name	Task Code No.
EVALUATION, TEACHING AND RELATED TASKS	
Case Conferences, Lectures, Orientation (continued)	
Planning and presenting cases and/or related lectures on diagnostic radiology and pathology to pathologists, radiologists and residents.	392
Planning and presenting lectures on assigned aspects of radiology for medical students.	320
Planning and presenting lectures and/or related laboratory sessions on radiation and/or health physics for students in professional programs for diagnostic radiology, in medical school, or in medical sciences.	559
Preparing lectures or participating in meetings of staff members in diagnostic radiology on radiation protection and quality assurance requirements and practices.	560
Orienting new staff member(s) to departmental standard operating and administrative procedures, floor plan, location of equipment and supplies, record keeping.	186
RESEARCH TASKS	
Formulating a problem for clinical research in diagnostic radiology.	66
Conducting literature review for clinical research problem in diagnostic radiology.	67
Preparing research design in clinical diagnostic radiology; supervising research; analyzing, evaluating results; and preparing report.	68
Collecting and presenting technical information about and/or recommending new diagnostic x-ray equipment.	557

TASKS LISTED BY TASK FUNCTION (continued)

Category and Abbreviated Task Name	Task Code No.
PERSONNEL MANAGEMENT TASKS	
Keeping attendance records and recording or reporting excessive lateness and/or absenteeism.	165
Conducting a private personnel meeting with subordinate.	307
Attending personal meeting with supervisor on functioning or personal, work-related problems.	293
Conducting counseling on professional or personal problems with residents in radiology.	350
Participating in diagnostic radiology departmental meeting.	326
Participating in meeting of diagnostic x-ray department technologists.	353
Participating in meeting of nursing personnel in x-ray department.	295
Calling and participating as supervisor in meeting of subordinates in department.	309

CHAPTER 3

EXTENDED TASK NAMES:

DIAGNOSTIC RADIOLOGY

There are 368 extended task names included in this chapter. These are arranged numerically by Task Code Number from Code 1 to Code 560. Not all numbers are represented in this volume, but all tasks in Volumes 1, 2 and 3 of this Report are represented.

Once a reader decides that he or she wishes to see a task description, it can be found by referring to the Task Code Number and volume number in this chapter. The Task Code numbers appear in the column on the left; the volume of Research Report No. 7 in which the full description appears is listed in the column on the right.

Some task listings have an asterisk (*) before the code number. This means that this is a new assignment to this number and indicates that an earlier use was made of the number, but that the earlier assignment is now obsolete. All other code numbers in this volume up to Code 273 are tasks that were also found by HSMS in the ambulatory care center where a pilot test of the HSMS method was carried out.

The underlined portion of each extended task name is the abbreviated name of the task. The abbreviated names are used as listings in the second chapter of Volumes 1, 2, 3 and 4 of this Report.

TASK CODE	EXTENDED TASK NAME	VOL. NO.
1	Conducting a radiographic barium enema study of lower gastrointestinal tract of any non-pediatric patient by deciding whether to go ahead based on patient's condition and scout film; reassuring patient; supervising or conducting administration of barium enema; viewing on fluoroscope monitor and taking spot films as decided; ordering radiographs, air contrast study; supervising or conducting air contrast enema; taking spot films and ordering radiographs; deciding when examination is completed by viewing radiographs; recording medical impressions, follow up care; notifying MD of emergency signs.	1
*2	Conducting a radiographic barium swallow study of esophagus of any non-pediatric patient by deciding whether to go ahead based on patient's condition and scout film; reassuring patient; supervising oral administration of barium mixture; viewing on TV monitor, and taking spot films and cine in appropriate positions as decided and with barium pill swallowed if so decided; ordering radiographs; deciding when examination is completed by viewing radiographs; deciding whether to order delayed films; recording medical impressions, follow up care and/or delayed films; notifying MD of emergency signs.	1
3	Conducting a radiographic barium study of upper gastrointestinal tract of any non-pediatric patient by deciding whether to go ahead based on pt.'s condition and scout film; reassuring pt.; supervising oral administration of barium mixture; viewing on TV monitor; taking spot films and cine with pt. in erect, prone, supine positions, with pressure applied by cone attachment, with barium pill swallowed if so decided; ordering radiographs;deciding when examination is completed by viewing radiographs; deciding whether to order delayed films and/or air contrast study of stomach; recording medical impressions; follow up care and/or delayed films and/or air contrast study; notifying MD of emergency signs.	1
*4	Conducting pelvic pneumography and/or pangynecography of non-infant female patient by reviewing, doing pelvic exam; deciding whether to go ahead and on route, site, technique; reassuring; inserting Foley catheter in uterus; injecting local anesthetic; puncturing posterior vaginal fornix or abdomen; inserting or attaching tubing; inducing pneumoperitoneum transuterinely, transvaginally or transabdominally; ordering pneumograms and viewing; instilling contrast medium through Foley catheter into uterus and tubes as decided; observing and filming filling under fluoroscopic control; ordering, approving pangynecograms; removing gas, instruments; recording medical impressions, orders for follow-up, delayed films; notifying MD of emergency signs.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
*5	Conducting hysterography or hysterosalpingography of a non-pediatric female patient by deciding whether to go ahead based on records, pelvic examination, sounding, and scout film; reassuring pt.; deciding on technique and contrast medium; instilling medium transuterinely using cannula; observing and recording fractional filling using radiography and/or fluoroscopic control; spot filming and/or making videotape record as decided; ordering, approving radiographs; when completed removing instruments; recording medical impressions, follow-up care, orders for post-evacuation films; notifying MD of emergency signs.	1
6	Reading, interpreting and making recommendations on routine radiographic materials including review of requisition sheet and available prior films; notifying ordering physician of emergency signs; dictating findings and recommendations; and placing report for typing.	1
7	Observing and evaluating work of radiologic technologists or students in diagnostic radiography, and deciding whether training is needed by observing, evaluating; comparing with performance standards; deciding whether training is needed; interrupting task and/or reporting or noting conclusions; asking to teach or that individual be taught in deficient areas.	2
*8	Shutting down computerized transverse axial scanning equipment, by turning off x-ray unit; unloading magnetic tape or disc, and storing; waiting for x-ray tubes to cool and shutting off appropriate units; turning off heat exchanger; reporting any problems or deciding to have tests made.	3
18	Drawing blood from any non-pediatric patient's vein on orders by determining amount needed for tests ordered; finding vein, inserting needle and drawing proper amount of blood into syringes or vacutainers; reporting inability to find vein; arranging to have specimens prepared and sent to lab; recording.	3
19	Administering test for allergy to iodine based contrast medium of any patient by deciding whether to go ahead based on case history and interview; injecting test dose intravenously and noting reaction; providing emergency care and/or care to control adverse reaction; deciding whether patient can tolerate full dose; informing patient of allergy; if requested and decided, administering full dose and/or recording reaction; telling technologist when to go ahead if appropriate; providing standby care if appropriate; recording results.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
*20	Directing respiratory tract tomography of any patient by reviewing preliminary tomograms; selecting positions, level, amplitude and number of "cuts"; reviewing tomograms; ordering additional tomograms; deciding when examination is completed; recording medical impressions.	1
33	Removing any patient's sutures, by reviewing case; applying antiseptic; lifting up sutures using clamp; cutting sutures and removing with forceps or tweezers; evaluating healing; ordering irrigation, bandaging, and/or antibiotic medication; ordering follow-up if needed; recording.	3
*65	Preparing specimens such as extravascular body fluids, washings, cell and/or tissue biopsies for transportation to laboratory, by checking type of specimen and lab tests to be ordered and arranging for needed supplies; receiving fluid or biopsy specimen; smearing and fixing slides for cytology, placing samples in culture media for bacteriology, placing tissues in preservative for histology; recording ID information, type of specimen, site, test ordered on label, order forms, chart as directed; having MD approve; arranging for delivery to lab(s).	3
*66	Formulating a problem for clinical research in diagnostic radiology by becoming aware of general areas for research; identifying the nature of the problem, its purpose, establishing its need; articulating problem in theoretical, fundable and/or operational terms; writing, dictating or transmitting formulated problem orally to supervisor, colleagues or students; deciding whether to pursue personally.	1
*67	Conducting literature review for clinical research problem in diagnostic radiology by determining nature of problem, relevant subjects in literature, sources, criteria for evaluation; obtaining literature, evaluating; preparing summaries, annotated bibliography; arranging for copying, purchase, borrowing, or doing personally; presenting bibliography and documents or setting aside for own use.	1
*68	Preparing research design in clinical diagnostic radiology; supervising research; analyzing, evaluating results; and preparing report by reviewing formulation of problem and purpose; selecting a research model; preparing proposal and/or budget; staffing and assigning work; selecting subjects; obtaining materials; supervising research; preparing and analyzing data; evaluating results; making recommendations; preparing report; terminating research; distributing report if appropriate.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
69	Processing exposed x-ray film in automatic processor by working under safelight; unloading film holder(s); transferring identifying information to film using flasher; adjusting temperature and timer if appropriate; splicing small size film to leader film; inserting in machine; placing for use or on view boxes; marking missing identification information after processing; reporting or deciding to investigate processing problems.	3
70	Inspecting, cleaning and readying x-ray film hand processing equipment for use by checking chemical solutions; draining, cleaning tanks; replacing or replenishing chemical solutions; stirring; checking temperatures and adjusting; cleaning film hangers; checking dryers and light leaks; indicating when ready.	3
71	Processing exposed x-ray film manually, by working under safelight; unloading film holders; transferring identifying information to film using flasher; checking tanks; placing films on hangers and properly immersing and agitating films for appropriate times in developer, rinse, acid stop bath, fixer, rinse, photoflow; placing in dryer; placing for use or on view boxes; marking missing identification information; reporting or deciding to investigate processing problems.	3
72	Loading x-ray film cassette(s), nonscreen film holder(s), box (es), and/or roll film cartridges by working under safelight; obtaining appropriate film type, speed, size; matching with cassette, intensifying screen(s), or nonscreen holder; inspecting, cleaning or replacing intensifying screens; inserting film(s) in holder(s); placing or delivering for use.	3
73	Reassuring any patient and/or accompanying adult about x-ray and/or fluoroscopy procedures, by being sympathetic, interested, professional, and calming patient or adult; explaining safety of procedures, what will happen, and answering non-medical questions about the procedures.	3
74	Explaining to any out-patient or accompanying adult proper at-home procedures to follow prior to coming for radiographic or fluoroscopic examination, by reading what is required; presenting written instructions; explaining; and checking that patient understands.	3
76	Checking supplies and ordering non-drug materials needed by department by filling out or having co-worker fill out standing orders; taking inventory and ordering items below par levels; noting or asking for requests for items; filling out requisition form or outside order form in duplicate; having orders delivered or placed for pick-up.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
*77	Providing emergency care for any patient having adverse reaction to radiographic contrast medium, procedures, or accident by assessing cause, nature, and severity of the reaction; using emergency care equipment to provide life support procedures and/or palliative medication; deciding whether procedure should be terminated; recording; terminating if appropriate; arranging to have patient sent to emergency room or hospitalized if appropriate.	3
78	Checking and jacketing patient's radiographs, ultrasonograms, and/or C.T.T. scans with requisition sheets and prior diagnostic materials and placing for filing or interpreting, by matching films and prints with requisition sheets and any prior diagnostic materials requested; checking for signatures, proper logging and identification; placing in proper sequence; inserting in jackets and/or envelopes; marking jackets with identification; placing for interpreting or filing.	3
79	Preparing barium sulfate contrast medium as ordered or for standard use by noting purpose, ingredients, proportions; obtaining materials; measuring and/or mixing solution or paste to be ingested under sterile conditions, or mixing ingredients for enema; assembling and clamping; hanging enema at appropriate height or placing contrast materials for use.	3
80	Preparing materials or trays with medications and materials for special treatments or procedures according to standard orders by obtaining order cards, filling trays or supplementing standard trays with medical supplies; measuring out medicinals and preparing solutions; deciding to do preparation of injections or ordering; checking emergency cart for supplies; covering prepared tray; placing for use or informing co-worker when materials are ready.	3
81	Providing technical quality review of "plain film" radiographs by reviewing requisition; arranging and viewing radiographs; checking completeness and assessing diagnostic quality; deciding to order additional views and/or retakes for medical reasons only; determining reasons for inadequate radiographs; recording views missing or retakes and adjustments needed; discussing and/or reporting problems with technologists and/or equipment in obtaining quality; notifying and/or consulting with radiologist on emergency signs; placing approved films for jacketing or use.	2

TASK CODE	EXTENDED TASK NAME	VOL. NO.
*82	Providing clinical training for radiologic technologists or students in radiographic technology by demonstrating procedures, explaining what is being done, answering questions; deciding when person being trained can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary; evaluating and recording or reporting.	2
95	Testing a urine sample by tablet or dipstick method and recording by selecting method, obtaining urine sample, using water and urine with tablet for sugar, water on tablet for ketones, and/or dipping dipstick into urine; comparing color change with color chart; reading and recording chart description.	3
98	Obtaining a clean catch urine specimen from any patient and preparing for lab by explaining clean catch procedure, giving kit, applying procedures to infant, using soap, water, swabs and self adhering urine bag; labeling, preparing for lab, and recording on patient's chart or index card; arranging to have specimen taken to lab.	3
113	Giving any patient general reassurance by listening, by being interested and sympathetic, by reassuring and comforting.	3
*128	Checking supply of narcotics or regulated drugs (or witnessing count); reordering, picking up, and restocking by obtaining key and narcotic control sheets; taking tallies of drugs on hand and used and comparing with numbers to be accounted for; investigating discrepancies and recording; calculating replacement needs from given par levels; reordering, picking up filled order using appropriate forms; replacing in cabinet; locking cabinet; returning key.	3
129	Checking supply and ordering non-narcotic medicinals needed by department by filling out standing orders; taking inventory and ordering items below par levels or expired; noting or asking for requests for items; filling out requisition form or outside order card in duplicate; having expired medicinals returned and orders delivered or placed for pick up.	3
131	Making assignments of staff to work areas, procedures, and/or MD's and/or vacations and lunch hours by assessing number of staff available, work load needs, need for rotation, considering experience and preferences; making assignments; filling out assignment sheet; placing for typing and/or posting; adjusting assignments to cover absences or latenesses on individual days.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
132	Requesting repair, replacement or other services of another hospital department orally and/or filling out requisition, by reviewing request, notifying department by phone, relaying necessary information; filling out appropriate requisition form, placing for pick-up or delivery.	3
133	Administering subcutaneous or intramuscular injection for any patient according to MD's orders after having quantity checked by obtaining medication and filling sterile syringes with proper amount of medications and having prepared quantity checked; checking for contraindications and informing MD if type or dosage is in doubt; advising patient of purpose and side effects of drugs; choosing injection site; injecting according to sterile procedure; filling out and signing narcotic regulation forms; recording medication given; checking and reporting side effects.	3
134	Logging and/or tallying patient services and/or instructional case record materials for use in record keeping, billing or instruction by obtaining information to be logged and appropriate forms or log book; ascertaining the information to be entered and entering as appropriate; tallying; returning original records; placing log book, tally and/or forms for filing or use as appropriate.	3
135	Cleaning an examination or treatment room after use by throwing away disposable used materials; wiping away blood and stains using antiseptic solution; replacing linens on treatment table; replacing used or displaced materials; arranging for housekeeping service if needed; returning any documents left in room as appropriate.	3
136	Checking and storing order for non-narcotic drugs and/or supplies by checking against order; notifying supply department or outside supplier of missing items; distributing to units, individuals, and/or storing in designated labeled locations.	3
137	Delivering prepared specimens or cultures to lab or incubator by taking to co-worker, placing in designated place and/or recording.	3
138	Reporting observed symptoms and concerns of any patient to physician or staff member by observing patient's behavior, engaging in conversation; verbally reporting information considered to be helpful for patient's care to physician or appropriate staff member.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
143	Catheterizing any female urethra as ordered by reassuring patient; assembling sterile equipment; preparing patient using sterile procedures; inserting catheter into urethra and bladder; reassuring patient or reporting excessive pain; collecting urine specimen, if appropriate; informing physician when catheter is inserted; telling MD when (if appropriate) catheter is held in place.	3
145	Preparing treatment or examination equipment for sterilization in autoclave by washing, soaking, drying; inspecting for damage or missing parts; assembling into individual sets and packets with autoclave paper or toweling and tape; labeling packets with contents and missing parts; assembling into packets by work area with autoclave paper or toweling and tape; labeling and taking to be autoclaved.	3
*147	Preparing or changing technique charts for specific x-ray and fluoroscopic equipment on orders (to reflect in-house experience, policy, new requirements or to compensate for deteriorating output) by checking required new information on technical factors, the equipment involved, and the projections; entering or changing information on existing or new technique charts; informing technologists of new information or changes.	3
153	Assisting physician or co-worker in special examination or treatment procedures by handing materials called for, turning equipment on or off as ordered, wiping away blood, reassuring and comforting patient, or restraining patient as requested.	3
155	Obtaining urine specimen on orders by explaining to patient how to provide or assisting; labeling specimen container; giving to ordering MD or co-worker or arranging to send to lab.	3
156	Irrigating, cleaning, dressing or redressing any patient's wound, burn or opening for catheter as ordered by removing old dressing, noting condition of wound and reporting suspicious symptoms; irrigating by squirting or pouring appropriate solution; cleansing with appropriate solution; applying medication and dressing as ordered; recording.	3
*158	Informally observing and evaluating patient care work of nursing and technologist staff in diagnostic radiography, and deciding whether training is needed by observing, evaluating; interrupting task and/or reporting or noting conclusions; asking to teach or that individual be taught in deficient areas.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
*163	Filling out institutional report form (such as for cancellation) as ordered by MD, by obtaining appropriate form as ordered, filling in patient's identification information; filling in or checking categories as directed by MD; having form checked and signed by MD; placing for pick up or use.	3
164	Filling out patient identification information on labels and forms in anticipation of need or as requested, by estimating need or referring to standard orders or request; getting information; filling in information; placing for use.	3
165	Keeping attendance records and recording or reporting excessive lateness and/or absenteeism by recording attendance as appropriate; noting whether there is excessive absenteeism, lateness, or abuse of lunch or break times; deciding to discuss or reporting to supervisor.	3
*166	Using isolation and decontamination techniques to prepare examination or treatment room or area and clean up afterwards for patient with infectious or communicable condition by preparing sterile materials for use; preparing for disposal of materials; arranging for self and staff to wear and properly discard sterile mask, gown, gloves; transporting patient; discarding contaminated materials; cleaning treatment or examination room.	3
*167	Inspecting and cleaning intensifying screens in cassette holders by checking dates of last cleaning; removing screens; using antistatic brush; using cleaner on cloth and wiping surfaces; drying; replacing damaged screens; reinserting screens in cassettes according to sizes and speeds; recording cleaning dates.	3
*173	Checking accuracy of x-ray machine timers (except phototimers) with spinning top test by setting appropriate technical factors; preparing cassette; spinning the top on cassette and exposing; repeating an appropriate number of times; interpreting processed radiographs based on number of dots appropriate for given exposure time and the known current impulses for rectified current; arranging for repair; shutting down unit or posting compensatory timer settings for use until repair is made; recording as appropriate and placing radiographs for filing.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
*175	Performing penetrometer calibration test of kVp or mA selectors of x-ray machine output by selecting appropriate test-constant technical factors and conditions for test; setting up cassette and penetrometer; varying kVp or mA (with timer adjustments for constant mAs) for each kVp or mA setting on control panel and making exposures for each; evaluating radiograph density and contrast for signs of damage or change in quality of output; assessing need for change in technique chart(s) to compensate for change in output; posting compensating changes in kVp or mA; arranging for repair; recording.	3
*178	Checking, preparing fluoroscope controls (and phototimer) by turning on power; selecting mode; selecting and setting technical factors, examination timer, exposure timer, spot film device; checking automatic density control with mA indicator; checking kVp, TV monitor and mA settings by adjusting control dials; checking phototimer by noting whether, with spot filming, safety timer is needed or processed spots are too light; arranging for repair and shutting down unit if warranted; reporting, recording as appropriate.	3
180	Preparing blood samples for the laboratory by preparing materials, labels and, if appropriate, adding anti-coagulant to test tubes; filling test tubes from syringe; attaching labels with relevant information to samples; placing for pick-up or delivery.	3
181	Catheterizing any male or female patient's urethra with retention balloon catheter by reassuring; assembling sterile equipment; preparing pt. using sterile procedures; inserting catheter into urethra and bladder; reassuring and/or collecting urine specimen; inflating balloon catheter with sterile water; attaching catheter to drainage or IV tubing; terminating and reporting if extreme pain or resistance is encountered; recording amount and appearance of urine collected; reporting when ready if appropriate.	3
182	Setting up and using suction machine to clear airway or to assist with gastric lavage, by obtaining materials and machine, preparing patient, checking machine, turning machine on and off as ordered for gastric lavage, or inserting catheter into tracheal opening and clearing airway; cleaning up afterwards.	3
*184	Relocking equipment box(es) with breakaway lock by checking contents, obtaining pieces of lock, and snapping lock into place.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
185	Administering oxygen from portable or piped outlet unit using oronasal or nasal mask according to MD's orders by connecting cylinder regulator; checking unit for pressure and flow; attaching to unit; deciding when to administer if so ordered; applying mask to patient; setting pressure and/or flow valves as ordered; observing patient; reassuring patient; terminating flow and removing as decided or as ordered.	3
186	Orienting new staff member(s) to departmental standard operating and administrative procedures, floor plan, location of equipment and supplies, record keeping by explaining, demonstrating, showing, giving copies of forms, rules and regulations, answering questions.	3
*187	Checking cassettes for proper film-screen contact by radiographing cassette with wire mesh screen placed on tube side surface; evaluating whether blurred shadows appear on radiograph; arranging to have defective cassette repaired or discarded; recording.	3
190	Assisting patient to or from wheelchair, stretcher, bed, or table and/or transporting patient to designated area by positioning vehicle, making vehicle stationary during shift, supporting patient; transporting; notifying appropriate personnel when patient arrives; presenting any documents.	3
*192	Inspecting, checking, preparing xeroradiography equipment for use by turning on; checking conditioner and processor, reloading loaded and empty storage boxes with plates; adding or replenishing toner and/or paper; unjamming paper or plate; doing test run; calling repair service for other problems or reporting.	3
193	Having any patient and materials prepared for special procedure and readying patient for examination by reviewing orders; arranging to have materials and injections prepared, have vital signs taken, have medication administered; preparing patient on examination table; exposing relevant area of patient's body; swabbing with antiseptic; notifying physician or co-worker when ready.	3
198	Administering medication orally to any patient according to MD's orders after having quantity checked by obtaining and measuring out proper medication and having it checked; checking on patient allergy; explaining use and/or side effects to patient; administering medication; filling out and signing proper forms if narcotic or regulated drug; recording medication given.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
199	Taking and recording vital signs (temperature, pulse, respiration and blood pressure) of any patient by preparing and screening patient; using rectal or oral thermometer for temperature; taking pulse and respiration rate, noting irregularities; taking blood pressure using proper equipment; recording or verbally reporting; noting abnormal signs and reporting to physician.	3
222	Making photocopies of documents, collating, and stapling; and placing for use.	3
223	Making up unoccupied bed or stretcher bed by obtaining clean linens; stripping bed and disposing of soiled linens; putting on sheets, pillow case, blanket and spread as appropriate.	3
*227	Checking for presence and condition of emergency supplies in proper locations; and restocking as needed by checking or having checked; restocking or ordering items damaged, used, or in short supply; discarding damaged or used medicinals and supplies.	3
*243	Restraining any patient, by deciding what type of restraint to use; holding or tying patient with restraining devices; trying to calm patient; asking for help and informing staff (if inpatient).	3
260	Preparing a hypodermic needle with injection dosage on orders by obtaining medication and filling sterile syringe with proper amount of medication; placing for use; filling out and signing narcotic regulation forms.	3
262	Taking an electrocardiogram of any patient as ordered or determined, by preparing patient, administering exercise as ordered; taking standard readings or as ordered; marking strips with location code; tearing off strip and writing patient identification information; attaching to request form and placing for processing; notifying physician of emergency signs in patient.	3
264	Ordering duplicate copies of forms, records, or documents by filling in order for predetermined amount, attaching to material to be copied, and placing for pick up or delivery.	3
267	Processing exposed Polaroid x-ray film with Polaroid automatic processing equipment by inserting cassette; activating machine and removing when appropriate; separating positive film image from cover sheet; writing identification information on radiograph using marker; applying coater; placing to be viewed or filed.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
269	Loading empty cassette with Polaroid x-ray film by obtaining empty cassette and prepared radiographic packet; inserting film packet in cassette; closing, and placing for use away from any intense light.	3
271	Deciding whether to call staff person to evaluate whether unusual EKG reading is artifact, or calling physician in case of serious patient distress, by observing EKG reading and patient, judging whether there is unusual reading or patient condition; avoiding alarming patient; calling appropriate staff member.	3
*272	Preparing and adjusting schedules for patient procedures by arranging requisitions by type of procedure and assigning times based on urgency, available staff, rooms, time needed for procedure(s), number of patients, and order in which procedures are done; assigning times to patients; recording and posting schedule; adjusting throughout day as appropriate.	3
273	Cleaning, inspecting and readying automatic x-ray film processor(s) for use by cleaning and checking machine parts; inspecting, changing, or supplementing developer and fixer solutions; turning on power and water; adjusting temperature; running test films and adjusting timing; checking on operation or noting jamming and deciding to fix or report.	3
274	Adding predetermined instruments and supplies to prepared procedure trays, by ascertaining procedure to be prepared for; referring to cards listing items to be added for procedures; obtaining items from storage; adding to trays and/or carts; if appropriate, labeling carts by procedure; covering trays with sterile towels; placing for pick-up or bringing to designated location.	3
275	Preparing radiographic subtraction prints by preparing in darkroom using printing frame or contact printer for exposures and film processor; preparing subtraction mask from scout radiograph and subtraction film; preparing subtraction print by taping mask in register with post-injection radiograph and using subtraction film and taped combination in printer; evaluating and/or showing to radiologist; preparing second-order subtraction print on orders by using scout and first-order mask in register to prepare second-order mask; using first- and second-order masks in register with post-injection radiograph and film to prepare second-order print; placing for use.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
276	Making minor adjustments or repair on automatic x-ray film processor by shutting down machine and investigating source of problem; deciding whether to order repair or adjust personally; cleaning machine of debris or dirt; adjusting temperature or timing; tightening or aligning parts; draining and refilling or replenishing chemical solutions in tanks; unjamming x-ray film; discussing improper exposure of films to light; rechecking machine with test films; arranging for repair if necessary.	3
277	Assigning scheduled patients to procedure rooms in appropriate order by checking on patient arrivals; reporting missing patients; assigning patients to rooms based on special needs of procedure, time required, urgency, and order of arrival; recording; distributing requisition sheets to technologists assigned to rooms.	3
278	Checking on reasons for nonappearance of in-patients for examinations or treatment by telephoning wards or floors, recording reasons; presenting complaint if appropriate; posting reasons in designated locations; notifying proper co-worker(s) of need to send someone to transport and/or to reschedule patient(s).	3
279	Notifying ward or floor personnel to ready and transport in-patients who are scheduled for specific procedures at specific times, by checking schedule; telephoning information; having patient brought down, or deciding to send subordinate, or notifying supervisor of need to send someone; leaving record of non-appearances on schedule sheet or in appropriate location.	3
280	Participating in monitoring of personal exposure to radiation by periodically turning in and replacing film strip in badge worn by performer, or telling supervisor when performer thinks excessive exposure has occurred; discussing source of any excessive radiation exposure and possible need for transfer from work assignment if appropriate.	3
281	Checking in-patients' identity against patients' treatment and medication check lists by checking identification bands; stamping arrival and departure times for procedures on check list; obtaining missing information for check lists; attaching cards to patients indicating special conditions.	3
282	Escorting adult out-patients to and/or from dressing rooms, treatment rooms and/or waiting areas, by transporting if necessary; explaining what to remove and what to put on; assisting in dressing and undressing if needed; keeping record of belongings placed in lockers; and returning belongings to patient.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
283	On orders deciding whether wound of any patient needing change of dressing needs attention of RN or can be done personally; changing simple dry dressing or reinforcing wet dressing by removing old dry dressing; applying sterile gauze and tape to wound or wet dressing; informing appropriate personnel of need to change wet dressing; informing ordering MD of what was done.	3
284	Checking presence and functioning of oxygen and/or suction equipment, and amounts of oxygen by checking whether units are in proper locations, checking oxygen pressure, contents, flow meter, and related supplies; deciding whether to have suction machine and/or drainage bottle washed; checking suction and presence of related supplies; reporting missing, empty or malfunctioning parts; restocking related supplies.	3
285	Checking for presence of emergency supplies in proper locations by observing and counting; reporting short supplies to supervisor.	3
286	Filling out standard order for linen, picking up, folding and storing; placing robes and gowns in dressing areas.	3
287	On orders, placing order for specific dietetic meal; picking up, delivering, and feeding patient if so decided; discarding disposable items.	3
288	Filling out and delivering standard order for food items for department; picking up, and placing food for storage in refrigerator and/or delivering to co-worker.	3
289	Bottle feeding a baby with pre-prepared formula by checking orders and formula; holding baby to support properly, holding bottle to avoid intake of air; burping, and cleaning face afterwards; recording.	3
290	Changing any patient's colostomy bag on orders by removing old bag, washing area with cleansing solution; putting on fresh sterile bag, cutting to fit and applying sealer; reassuring patient; cleaning soiled materials and supplying fresh gown and linens.	3
291	Taking and reporting temperature of any non-pediatric patient with oral thermometer on orders, by shaking down sterilized thermometer, inserting and leaving in patient's mouth for three minutes; reading; informing ordering MD or RN.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
292	Obtaining and examining fresh stool from any patient and reporting unusual or suspicious appearance, on orders, by requesting that patient evacuate; obtaining stool or reporting patient's inability to evacuate; examining stool and judging general appearance; reporting opinion to ordering RN or MD; discarding or turning over specimen to ordering RN or MD.	3
293	Attending personal meeting with supervisor on functioning or personal, work-related problems, by requesting meeting or being notified; discussing problems raised by supervisor, or raising problems with supervisor and discussing; acknowledging or writing comments on evaluation or disciplinary warning; expressing preferences for work time, assignments, training, etc.	3
294	Assigning subordinate and explaining assignment to transport patient, obtain materials or documents, or assist co-worker by evaluating need, choosing subordinate, explaining, and providing information needed.	3
295	Participating in meeting of nursing personnel in x-ray department, by raising questions or problems, discussing or listening to information about department rules or functioning, new equipment, patient care, or general complaints.	3
296	Providing first aid in x-ray department emergency by determining nature and severity of symptoms, calling MD, and deciding whether to send patient to emergency room; doing so; deciding what first aid or care to give; giving care with first aid for heart, respiration, bleeding, fracture, shock, or convulsions; informing physician of what was done.	3
297	Obtaining and checking keypunch control card for serial cassette changer as ordered, by finding card and checking punches, or ordering card, checking punches, and having test run made; writing sequence on card and placing for use.	3
298	Administering medication orally to any patient according to MD's orders by obtaining and measuring out proper medication, checking on patient allergy; explaining use and/or side effects to patient; administering; filling out and signing proper forms if narcotic or regulated drug; recording medication given.	3
299	Administering subcutaneous or intramuscular injection for any patient according to MD's orders by obtaining medication and filling sterile syringe with proper amount of medication; checking for contraindications, allergy; informing MD if type	3

(continued)

TASK CODE	EXTENDED TASK NAME	VOL. NO.
299	(continued) or dosage is in doubt; advising patient of purpose and side effects of drugs; choosing injection site; injecting according to sterile procedure; filling out and signing narcotic regulation forms; recording medication given; checking and reporting side effects.	
300	Checking and submitting accumulated patient's treatment and medication check lists for in and out time stamps by obtaining, checking, asking for missing information and entering; arranging to take to designated office.	3
301	Diapering a baby by checking orders, removing clothes and soiled diaper, cleansing; rediapering; redressing; recording.	3
302	Placing or making call and delivering non-medical message at patient or co-worker's request, by obtaining information and number, dialing, asking for requested person, and giving telephone to patient or relaying message.	3
303	Arranging, measuring and recording food intake and excretory output as ordered, by arranging to have patient given amount of food and/or drink ordered; recording times; recording time and amount of urine and/or feces eliminated; noting whether urine and/or feces look suspicious; reporting abnormal appearance.	3
304	Readying emergency cart by checking for presence, par amounts and expiration dates of medicinals and treatment trays; restocking prepared injections and medicinal supplies; reporting incomplete or damaged articles or trays; checking functioning of oxygen, defibrillator and EKG equipment; reporting malfunctioning, expiration of equipment or short supplies; restocking with materials as needed.	3
305	Providing informal clinical training in patient care for non-MD personnel in diagnostic radiography by demonstrating procedures, explaining what is being done, answering questions; deciding when persons can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary; informally noting or reporting evaluations.	3
306	Formally evaluating subordinates' work by filling out descriptive and/or rating-scale evaluation forms, by assembling relevant notes, folders, and records; reviewing; writing out comments and answers to questions and/or choosing scale values or descriptors; presenting to subordinates and/or supervisor.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
307	Conducting a private personnel meeting with subordinate by assessing seriousness of problems; arranging for meeting; discussing work-related problems, recommending improvement, solutions to problems, training; arranging for and writing written warning; recording and distributing forms as appropriate.	3
308	Setting up and monitoring any patient's electrocardiogram during special procedure, by reviewing orders; setting up equipment for oscilloscope, audio, paper or film recording of cardiograms, multichannel monitoring including arterial or heart pressure, synchronization with cineradiography, pressure injector; standardizing equipment; determining changes to report; monitoring; reporting significant changes in ECG and/or pressure; removing equipment when ordered; placing film for processing.	3
309	Calling and participating as supervisor in meeting of subordinates in department, by calling meeting; raising questions or problems; leading discussions and listening to information about department rules or functioning; demonstrating new equipment or procedures; discussing problems of patient care, or general complaints; giving information; leading meeting to point of voting on resolutions; planning follow-up on decisions.	3
310	Selecting gastrointestinal and biliary tract radiographic materials for use in case conference or lecture presentations or for inclusion in library, by reviewing materials and related case histories, discussing with resident; selecting radiographs as needed; arranging for personal use or jacketing for library; arranging for return of unused materials.	1
311	Deciding on type of urographic procedure(s) to order for any patient in consultation with referring physician and/or specialists, by reviewing case history and relevant materials, discussing, and deciding what procedure(s) to order; recommending appropriate techniques; deciding on anesthetic, preparatory patient regimen; recording decisions and recommendations; arranging for scheduling.	1
312	Conducting intravenous pyelography (IVP) examination of any non-pediatric patient by checking scout film and interviewing patient; deciding whether there are contraindications; if routine request, deciding on infusion or injection method; injecting test dose of iodine based contrast medium; observing reactions and deciding on whether to proceed; administering	1

(continued)

TASK CODE	EXTENDED TASK NAME	VOL. NO.
312	(continued) full dosage and/or providing emergency care; ordering special views or change in technical factors; deciding when examination is completed by viewing IVP's; recording medical impressions and needed nursing follow-up.	
313	Directing nephrotomography of any patient by deciding whether to proceed; reassuring patient; reviewing preliminary films; selecting positions, levels, and distances of tomogram "cuts"; setting up IV infusion of contrast solution; ordering nephrotomography at appropriate time; deciding when examination is completed by viewing nephrotomograms; recording medical impressions and needed nursing follow-up.	1
314	Deciding whether to order non-neurologic computerized transverse axial tomography for any patient and/or alternative studies in consultation with referring physician, by reviewing scans and radiologic studies and clinical history, discussing, considering appropriateness of procedure; approving, refusing approval and/or recommending alternative studies; dictating reasons for refusal if requested; if approved, recommending technique for slices, use of contrast, prior preparation; recording orders and recommendations; placing for scheduling and/or typing; expediting if appropriate.	1
315	Performing renal cyst puncture and conducting related radiography of any patient by deciding whether to go ahead; reassuring pt.; deciding on technique; injecting radiopaque solution; injecting anesthetic; inserting puncture needle using fluoroscopy; extracting cyst fluid; having sample prepared for lab; evaluating need for surgery and/or radiography, and/or sclerosing of cyst; injecting air and contrast solution into cyst cavity; injecting sclerosing agent; ordering radiography; deciding when examination is completed by viewing radiographs; recording medical impressions, follow-up care.	1
316	Assisting in renal biopsy of any patient by using fluoroscopy to place biopsy needle, by reviewing radiographic materials; using fluoroscope to guide needle placement to correct chosen tissue location and depth of entry in kidney; recording if appropriate.	1
317	Reading, interpreting and making recommendations on urographic materials, or giving opinions to co-workers by reviewing medical information and requisition sheet(s); evaluating new and old films; notifying ordering physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
318	Providing clinical training for radiology residents in urographic procedures by demonstrating procedures, explaining what is being done, answering questions; deciding when residents can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1
319	Applying print coater to photographs, by obtaining materials; applying coater; placing to dry; writing identification information; placing dried prints for use.	3
320	Planning and presenting lectures on assigned aspects of radiology for medical students by deciding on content, method of presentation; preparing material; presenting lecture, being aware of responses, and adjusting presentation to students' needs.	1
321	Participating in radiologists meeting to arrive at overall clinical and academic assessments of residents in radiology by contributing personal opinions based on supervisory, counseling, and teaching experience with residents; participating in discussions and decisions on overall assessments and grade for each resident.	1
322	Deciding on diagnostic radiology library acquisitions of books, journals and radiographic materials, by reviewing advance notices and submissions; coding library acquisitions using Anatomic-Pathological Code System.	1
323	Participating in meetings of radiologists, urologists and nephrologists to discuss new developments, cases of interest, and case problems in the fields of urology and urography by planning and presenting new developments in the urographic or radiologic field, interesting case studies, or problems in current cases, and/or by deciding to listen to presentations about new developments in urology, interesting case studies, or case problems, and participating in discussions; contributing from own knowledge and experience in the field.	1
324	Participating in meetings of physicians involved with arthritis to discuss new developments, cases of interest and case problems in the field by planning and presenting new developments in the fields of arthritis or radiology, interesting case studies, problems in current cases and/or by deciding to listen to presentations about new developments, interesting case studies or case problems, and participating in discussions.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
325	Participating in meetings of radiologists, surgeons and pathologists to discuss new developments, cases of interest and case problems in the fields of surgery and radiology by planning and presenting new developments in the radiologic field, interesting case studies or problems in current cases and/or by deciding to listen to presentations about new developments in surgery, interesting case studies or case problems, and participating in discussions.	1
326	Participating in diagnostic radiology departmental meeting by raising issues dealing with staff functioning, procedures, equipment and supplies, and/or professional information; presenting report on research; participating in discussions and helping to arrive at resolutions by discussing issues and voting; arranging for transmission of decisions to staff and/or incorporating into instruction for staff as appropriate.	1
327	Participating in monitoring of personal exposure to radiation by periodically turning in and replacing film strip in badge; evaluating posted exposure listings; discussing source of any excessive exposure found and/or what to do if personal exposure levels are near safety maximum.	3
328	Deciding whether to order lymphangiography of any patient or alternative studies and recommending technique, in consultation with referring physician, by reviewing case history and relevant materials; discussing, recommending studies to be done and technique; recording; arranging for scheduling.	1
329	Conducting lymphangiography of any patient, by deciding whether to proceed; reassuring pt.; injecting dye and anesthetic as appropriate; deciding on entry site(s); setting up injector-heater with contrast medium; injecting anesthetic; exposing lymphatic vessel(s) by incising and tying; inserting needles with tubes; testing for perforation and placement using air in syringe and radiography; connecting injector-heater;checking progress of injection; deciding when to terminate; removing needles; suturing incisions; ordering and evaluating lymphangiograms; ordering delayed lymphadenograms; recording medical impressions and follow-up orders.	1
330	Reading, interpreting and making recommendations on lymphangiograms, or giving opinions to co-workers by reviewing medical information and requisition sheet, evaluating new and old films; notifying ordering physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
331	Deciding whether to order non-neurologic tomography for any patient or alternative studies, and recommending technique in consultation with referring physician by reviewing recent radiologic studies, discussing, considering contraindications and need; approving, recommending alternative studies, and/or refusing approval; dictating reasons for refusal if requested; if approved, recommending technique for "cuts;" recording orders and recommendations; placing for scheduling and/or typing.	1
332	Reading, interpreting and making recommendations on non-neurological tomograms or giving opinions to co-workers by reviewing medical information and requisition sheet(s), evaluating tomograms and current films; notifying ordering physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1
333	Deciding on and scheduling cleft palate radiological study for any patient, by discussing nature of case with appropriate cleft palate clinic staff; recording orders; arranging for scheduling.	1
334	Conducting a fluoroscopic and cineradiographic cleft palate study of any patient by reviewing materials and reassuring patient and accompanying adult; rehearsing patient in test patterns, selecting alternatives; checking patient position and technical factors on fluoroscope monitor; making cine record while instructing patient in test patterns; deciding when test is completed; recording observations and preliminary findings.	1
335	Reading, interpreting and making recommendations on cineradiographic cleft palate studies, and/or advising co-workers on interpretation, and/or presenting interpretation at cleft palate case conference, by reviewing medical information and requisition sheet, evaluating new cine film and relevant old films; notifying ordering physician of emergency signs; explaining opinions, making presentation, or dictating findings and recommendations; and/or answering questions; placing report for typing or final report for filing.	1
336	Providing clinical training for radiology residents in lymphangiography procedures by demonstrating procedures, explaining what is being done, answering questions; deciding when residents can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
337	Participating in meetings with pulmonary specialists, surgeons and pathologists to discuss new developments, cases of interest, and case problems in pulmonary medicine, surgical pathology and thoracic surgery by planning and presenting new developments in the radiologic field, interesting case studies or problems in current cases, and/or by deciding to listen to presentations about new developments in surgery, interesting case studies or case problems, and participating in discussions.	1
338	Participating in meetings of physicians involved with plastic surgery to discuss new developments, cases of interest, and case problems in the field, by planning and presenting new developments in radiology, reading and interpreting radiographs of interesting case studies; and participating in discussions.	1
339	Deciding on type of gastrointestinal and/or biliary radiographic examinations to order for any patient in consultation with referring physician and/or specialists, by reviewing case history and relevant materials, discussing, considering contraindications and need; approving, recommending alternative studies, and/or refusing approval; dictating reasons for refusal if requested; if approved, recommending technique, ordering anesthetic, patient preparation; recording orders and recommendations; placing for scheduling and/or typing.	1
340	Conducting hypotonic duodenography of any non-pediatric patient by deciding whether to go ahead based on patient's condition and scout film; reassuring pt.; injecting anticholinergic drug; inserting naso-gastric tube into duodenum under fluoroscopy; injecting barium solution through tube; fluoroscoping and taking spot films; injecting solution to stop peristaltic action in duodenum; fluoroscoping and taking spot films; injecting air contrast through tube; fluoroscoping and taking spot films; ordering radiographs; deciding when examination is completed by viewing radiographs; recording medical impressions and ordering follow-up care.	1
341	Conducting small bowel enema radiographic study of any non-pediatric patient by deciding whether to go ahead based on patient's condition and scout films; reassuring patient; injecting barium solution through naso-enteric tube previously inserted; fluoroscoping and taking scout films; ordering radiographs; deciding when examination is completed by viewing radiographs; recording medical impressions and ordering follow-up care.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
342	Evaluating oral cholecystograms or oral cholangiograms; conducting fluoroscopy and/or post-fatty meal, post-evacuation study of any non-infant patient involved if so decided by reading and interpreting radiographs, deciding whether to order second day study, do fluoroscopy; if decided, conducting fluoroscopy and taking spot films; deciding whether to order post-fatty meal, post-evacuation radiographs; if decided, evaluating radiographs and/or conducting fluoroscopy; deciding whether to order delayed films; recording medical impressions and orders; notifying MD of emergency signs.	1
343	Conducting percutaneous (transhepatic) cholangiography of any non-pediatric patient by deciding whether to go ahead; reassuring patient; deciding on site of entry; injecting anesthetic; inserting teflon puncture needle into bile duct using fluoroscopy; checking for correct entry; attaching drainage tube to sheath in duct; injecting iodine based aqueous contrast solution through tube; ordering radiographs; conducting fluoroscopy and taking spot films; deciding when examination is completed by viewing cholangiograms; deciding whether to leave drainage tube in place and removing or reinforcing; recording medical impressions and/or discussing with surgeon; ordering follow up care.	1
344	Conducting intravenous cholangiography and cholecystography (IVC) of any non-infant patient by checking scout film and interviewing patient; if appropriate, injecting test dose of iodine based contrast medium, observing reactions, and deciding whether to proceed, administering full dosage and/or providing emergency care; ordering time sequence cholangiograms; ordering, as decided, tomograms, cholecystograms, post-fatty meal, post-evacuation cholecystograms; deciding when examination is complete by viewing radiographs; recording medical impressions, follow-up care and orders for delayed series.	1
345	Conducting T-tube cholangiography of any patient by deciding whether to go ahead; reassuring patient; injecting iodine based contrast solution into common bile duct through T-tube; fluoroscoping and taking spot films; ordering radiographs; deciding when examination is completed by viewing cholangiograms; recording medical impressions and ordering follow-up care.	1
346	Reading, interpreting and making recommendations on radiographs of gastrointestinal and/or biliary tracts, or giving opinions to co-workers by reviewing medical information and requisition sheet(s), evaluating new and old films; notifying ordering physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
347	Providing clinical training for radiology residents in radiographic study of the gastrointestinal and biliary tracts by demonstrating procedures, explaining what is being done, answering questions; deciding when residents can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1
348	Planning and presenting lectures or case conferences on gastrointestinal and biliary tract radiology for radiology residents by deciding on content, method of presentation; preparing material; presenting lecture, being aware of responses and adjusting presentation to students' needs; using radiographic material in question and answer format to demonstrate aspects of topics for instructional purposes.	1
349	Planning and presenting lectures on gastrointestinal and biliary tract radiology for medical students by deciding on content, method of presentation; preparing material; presenting lecture, being aware of responses, and adjusting presentation to students' needs.	1
350	Conducting counseling on professional or personal problems with residents in radiology, by deciding to call meeting on problems or agreeing to meet when contacted by resident; presenting or finding out the nature of the problem; providing guidance on professional or personal options; planning remedial work assignments and following progress; discussing with other radiologists and resident as needed; recording as appropriate.	1
351	Deciding on whether to enter suggested radiographs of gastrointestinal and biliary tracts into log book based on quality and educational value by reviewing, deciding on merits, and arranging to have description entered in log book and/or materials placed for refiling.	1
352	Participating in meetings of radiologists, surgeons and pathologists to discuss new developments, cases of interest and case problems in the field of gastrointestinal and biliary surgery and radiology by planning and presenting new developments in the radiologic field, interesting case studies or problems in current cases and/or by deciding to listen to presentations about new developments in surgery, interesting case studies or case problems, and participating in discussions; leading conference sessions when appropriate.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
353	Participating in meeting of diagnostic x-ray department technologists, by reviewing agenda and notes; raising issues; receiving information about and/or discussing departmental rules, functioning, new equipment, patient care, related problems or complaints.	2
354	Obtaining patient records for use in examination, procedure, treatment or conference by determining the pt. records required; checking for presence of documents needed; ordering what is needed from appropriate department orally and/or with requisition sheet; arranging to have records delivered; placing complete set for use as appropriate.	3
355	Taking plain film radiographs of fingers, hand(s) or wrist(s) of non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; setting up for multiple views and/or magnification technique as appropriate; selecting and setting technical factors; identifying film; positioning pt. and equipment; providing shielding; collimating; making exposures; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned and placing radiographs for filing as appropriate; recording examination.	2
356	Taking plain film radiographs of forearm and/or elbow joint of non-infant patient by reviewing request, reporting observed contraindications; reassuring pt.; measuring pt.'s part(s); selecting and setting technical factors; identifying film; positioning pt. and equipment for conventional or magnification technique; providing shielding; collimating; making exposures; after processing and review repeating for appropriate views until full set of radiographs are completed as ordered; having pt. returned; placing films for use; recording examination.	2
357	Taking plain film radiographs of humerus and/or shoulder girdle of non-infant patient by reviewing request; reporting observed contraindications; reassuring patient; measuring parts; setting up for conventional or magnification technique; selecting and setting technical factors; identifying film; positioning patient and equipment for erect or recumbent exposure; providing shielding; collimating; making exposures; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2

TASK CODE	EXTENDED TASK NAME	VOL. NO.
358	Taking plain film radiographs of toes, foot and/or ankle joint of non-pediatric patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; setting up for multiple views and/or magnification technique; selecting and setting technical factors; identifying film; positioning pt. and equipment for erect or recumbent views; providing shielding; collimating; making exposures; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
359	Taking plain film radiographs of leg(s), knee(s) and/or femur(s) of non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; setting up for multiple views and/or magnification technique; selecting and setting technical factors; identifying film; positioning pt. and equipment for seated or recumbent exposure; providing shielding; collimating; making exposures; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
360	Taking plain film radiographs of pelvis, hips and/or upper femora of non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; setting up for magnification technique; selecting and setting technical factors; identifying film; positioning pt. and equipment for erect or recumbent exposure; providing shielding; collimating; making exposures; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
361	Taking plain film radiographs of vertebral column of non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; setting up for magnification technique; selecting and setting technical factors; identifying film; positioning pt. and equipment for erect or recumbent exposure; providing shielding; collimating; making exposure; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2

TASK CODE	EXTENDED TASK NAME	VOL. NO.
362	Taking plain film radiographs of sternum, ribs and/or thoracic viscera of non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; setting up for magnification technique; selecting and setting technical factors; identifying film; positioning pt. and equipment for erect or recumbent exposure; providing shielding; collimating; administering barium for heart series; making exposures; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
363	Taking plain film radiographs of abdominal contents of non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; selecting and setting technical factors; identifying film; positioning pt. and equipment for erect or recumbent exposure; providing shielding; collimating; making exposure; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
364	Taking radiographs of anterior portion of the neck of non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; selecting and setting technical factors; identifying film; positioning pt. and equipment for erect or recumbent exposure; providing shielding; collimating; instructing pt. in breathing, phonating, maneuver, or swallowing; making exposures; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
365	Taking plain film radiographs of the skull and/or face of non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; setting up for magnification technique, bilateral exposures, stereography as ordered; selecting and setting technical factors; identifying film; applying localization marks and/or devices; positioning pt. and equipment for seated or recumbent exposure; providing shielding; collimating; making exposure; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
366	Taking plain film radiographs of the paranasal sinuses of a non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; setting up for bilateral exposures, stereography as ordered; selecting and setting technical factors; identifying film; positioning pt. and equip-	2

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366	(continued) ment for erect seated or recumbent exposure; providing shielding; collimating; making exposure; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	
367	Taking preliminary localization radiographs of foreign bodies in orbit or eye of non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; measuring part; selecting and setting technical factors; identifying film; positioning pt. and equipment for seated or recumbent exposure; providing shielding; collimating; making exposure; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
368	Taking mammograms (radiography or xeroradiography) of non-infant patient by reviewing request; reporting observed contraindications; reassuring pt.; positioning pt.; applying compression cone; measuring part; selecting and setting technical factors; identifying film; positioning equipment for erect and recumbent exposures; providing shielding; collimating; making exposures; having mammograms processed or processing xeroradiographs; reviewing; taking to radiologist; continuing and/or repeating as ordered for full set of views; having pt. returned; placing mammograms for use; recording examination.	2
369	Preparing, transporting, setting up and returning mobile portable radiography equipment for bedside radiography by selecting appropriate equipment; preparing equipment and materials for use; transporting; setting up as appropriate for needs of examination and safety; checking for appropriate requisition and orders; deciding on radiography procedure; dismantling and returning equipment after use.	2
370	Taking operative orthopedic radiographs of any patient (such as in hip pinning) by reviewing request; assembling, checking, cleaning, transporting and setting up x-ray equipment for use in operating room; selecting and cleaning accessories; measuring part; selecting and setting technical factors; positioning tubes; indicating placement of cassette tunnels and patient on table; providing shielding; making pre-operative and operative exposures as ordered, observing sterile technique; arranging for processing and viewing by surgeon as films are processed; recording examination; returning equipment after use.	2

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371	Taking operative cholangiograms, pancreatograms or similar operative radiographs of any patient by reviewing request; assembling, checking, cleaning, transporting and setting up x-ray equipment in operating room; measuring part; positioning equipment and cassette holders and/or patient; selecting and setting exposure factors for scout and contrast films; collimating; providing shielding; observing sterile procedures; making exposures on signal; arranging for processing and viewing by surgeon; repeating as ordered; recording examination; returning equipment after use.	2
372	Taking intravisceral or isolated operating room radiographs of any patient by reviewing request; assembling, checking, cleaning, transporting and setting up x-ray equipment in operating room; preparing small size film packets; placing in sterile packet-holder following sterile technique; adjusting x-ray tube; selecting and setting exposure factors; collimating; checking shielding; making exposure on signal; removing film packet from bloody holder; arranging for processing and viewing by surgeon; repeating as ordered; recording examination; returning equipment after use.	2
373	Taking operating room radiographs for opaque foreign body search by reviewing request; assembling, checking, cleaning, transporting and setting up x-ray equipment in operating room; selecting and setting technical factors; arranging for patient and cassette placement, observing sterile technique; positioning tube; arranging for shielding; collimating; making exposure on signal; arranging for processing and viewing by surgeon; repeating as ordered;recording examination; returning equipment after use.	2
374	Taking tomograms of non-infant patient by reviewing request; reporting observed contraindications; preparing equipment; reassuring pt.; localizing lesion from plain films; setting up layer height, amplitude and technical factors for scout tomograms as ordered; providing shielding; positioning pt.; collimating; identifying; exposing scout tomograms and arranging for processing; taking to radiologist; taking full set of tomograms, continuing as ordered; having pt. returned; placing tomograms for use; recording examination.	2
375	Taking sialograms of any patient by reviewing request;preparing equipment ;preparing and reassuring pt.;measuring part;setting up for magnification technique;taking scout films as ordered;selecting and setting technical factors;identifying films; positioning pt. and equipment; providing shielding; assisting with instillation and evacuation of contrast; collimating; making expo-	2

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375	(continued) sures as and when ordered; arranging for processing; taking to radiologist; continuing, repeating; taking post-evacuation films as ordered; having pt. returned; placing sialograms for use; recording examination.	
376	Taking lymphangiograms or lymphadenograms of any patient, by reviewing request; reassuring pt.; measuring part(s); preparing equipment; arranging for radiography of needle placement; assisting with administration of contrast; selecting and setting technical factors; identifying film(s); positioning pt. and equipment; providing shielding; collimating; making exposures of iliac nodes, lymph vessels or nodes as and/or when ordered; arranging for processing; taking to radiologist; continuing as ordered; arranging for delayed films of lymph nodes if ordered; having pt. returned; placing radiographs for use; recording examination.	2
377	Taking positive contrast arthrograms (especially of knee) of any patient, by reviewing request; preparing equipment; preparing and reassuring pt.; measuring part; setting up for fluoroscopy and spot filming; arranging for scout films as ordered; selecting and setting technical factors; identifying films; providing shielding; assisting with instillation of contrast, positioning of patient, fluoroscopy, and spot filming; taking overhead radiographs as ordered; arranging for processing; taking to radiologist; continuing, repeating as ordered; having pt. returned; placing arthrograms for use; recording examination.	2
378	Taking bronchograms of a non-pediatric patient, by reviewing request; preparing equipment; preparing and reassuring pt.; measuring chest; setting up for fluoroscopy and spot filming; arranging for scout films as ordered; setting technical factors; identifying films; providing shielding; assisting with instillation of catheter, contrast, positioning of pt.; fluoroscopy, spot filming; taking overhead bronchograms as ordered; arranging for processing; taking to radiologist; continuing, repeating as ordered for second side, delayed filming; assisting in removal of contrast; having pt. returned; placing bronchograms for use; recording.	2
379	Carrying out radiologic technology for bronchoscopy or needle lung biopsy of a non-pediatric patient, by reviewing request; preparing equipment; preparing and reassuring pt.; measuring chest; setting up for fluoroscopy and spot filming; arranging for scout films as ordered; setting technical factors; identifying films; providing shielding; assisting with position- (continued)	2

TASK CODE	EXTENDED TASK NAME	VOL. NO.
379	(continued) ing of pt., fluoroscopy, spot filming, removal of bronchoscope; taking overhead chest films as ordered; arranging for processing; taking to radiologist; continuing, repeating as ordered; having pt. returned; placing radiographs for use; recording examination.	
380	Providing technical assistance for laryngography or cleft palate study of any patient (or any similar fluoroscopic examination including spot filming and/or cineradiography) by reviewing request, preparing equipment and patient; setting factors for fluoroscopy, spot filming, cineradiography; identifying films; providing shielding; assisting with positioning of pt., tube, table; arranging for processing; having patient returned; recording examination.	2
381	Taking upper GI radiographs of non-pediatric patient, by reviewing request; preparing equipment; preparing and reassuring pt.; measuring parts; setting up for fluoroscopy, spot filming and cine; arranging for scout films as ordered; setting technical factors; identifying films; providing shielding; assisting pt. to swallow barium sulfate contrast; assisting in positioning of pt., fluoroscopy, spot filming; taking overhead radiographs as ordered; arranging for processing; taking delayed film series as ordered; having pt. returned; placing radiographs for use; recording.	2
382	Taking small intestine intubation radiographs of a non-pediatric patient, by reviewing request; preparing equipment; preparing and reassuring pt.; measuring abdomen; setting up for fluoroscopy and spot filming; arranging for scout films as ordered; setting technical factors; identifying films; providing shielding; assisting with insertion of catheter, use of contrast, positioning of pt., fluoroscopy, spot filming; taking overhead radiographs and series as ordered; arranging for processing; taking to radiologist; continuing, repeating as ordered; having pt. returned; placing radiographs for use; recording.	2
383	Taking barium enema radiographs of non-pediatric patient by reviewing request; preparing equipment, pt.; reassuring; measuring; setting up for fluoroscopy, spot filming; arranging for scout films; setting technical factors; identifying films; providing shielding; inserting enema tip; assisting with flow of contrast, fluoroscopy, spot filming, air contrast; taking pre- and post-evacuation and air contrast radiographs as ordered; arranging for processing, clean up; having pt. returned; placing radiographs for use; recording.	2

TASK CODE	EXTENDED TASK NAME	VOL. NO.
384	Taking oral cholecystograms and cholangiograms of non-infant patient, by reviewing request; preparing, instructing and reassuring pt.; measuring abdomen; setting up for fluoroscopy, spot filming; taking scout films as ordered; setting technical factors; identifying films; providing shielding; assisting in positioning of pt., fluoroscopy, spot filming; taking overhead cholecystograms as ordered; arranging for processing; arranging for fatty meal; taking post-meal, post-evacuation cholangiograms as ordered; having pt. returned; placing radiographs for use; recording.	2
385	Taking intravenous cholangiograms and cholecystograms of non-infant patient by reviewing request; preparing patient and equipment; measuring; taking scout; assisting with test dose and infusion of contrast; setting technical factors, identifying film, positioning pt., providing shielding, collimating, teaching breathing; taking postinjection cholangiograms as ordered; arranging for processing; taking tomograms, cholecystograms, arranging for fatty meal and post-meal radiographs as ordered; having pt. returned; placing radiographs for use; recording.	2
386	Taking percutaneous or T-tube cholangiograms of non-infant patient by reviewing request, preparing pt. and equipment; measuring; setting up for fluoroscopy, spot filming; taking scout films as ordered; setting technical factors; identifying films; collimating; providing shielding; assisting in positioning of pt., fluoroscopy, spot filming; taking postinjection cholangiograms as ordered; arranging for processing; continuing as ordered; having pt. returned; placing radiographs for use; recording.	2
387	Taking intravenous pyelograms and urograms of non-pediatric patient by reviewing request; preparing pt. and equipment; taking scout; assisting with test dose and injection or infusion of contrast; setting technical factors; identifying film; positioning pt.; providing shielding, compression; collimating; taking series of postinjection and postmicturition urograms as ordered; arranging for processing; presenting for review; continuing as ordered; having pt. returned; placing urograms for use; recording.	2
388	Taking infusion nephrotomograms of any patient, by reviewing request; preparing pt. and equipment; measuring; taking scout overhead, tomograms as ordered; assisting with infusion of contrast; setting technical factors, amplitude, layer height as	2

(continued)

TASK CODE	EXTENDED TASK NAME	VOL. NO.
388	(continued) ordered; providing shielding; positioning pt.; collimating; identifying, exposing nephrotomograms;arranging for processing; taking to radiologist; continuing, taking pyelograms as ordered; having pt. returned; placing radiographs for use; recording.	
389	Taking percutaneous antegrade or renal cyst pyelograms of non-infant patient by reviewing request; preparing equipment and pt.; measuring; setting up for fluoroscopy, spot filming; taking scout films; assisting with infusion, puncture, injection procedures, fluoroscopy and spot filming; setting technical factors; identifying films; providing shielding; collimating; taking overheads as ordered; arranging for processing; taking to radiologist; continuing, repeating as ordered; having pt. returned; placing pyelograms for use; recording examination.	2
390	Taking cystograms and voiding cystourethrograms of any patient, by reviewing request; preparing pt. and equipment; taking scout; assisting with catheterization and injection or infusion of contrast through catheter; setting technical factors; identifying film; positioning pt.; providing shielding; collimating; taking pre-voiding, voiding and post-voiding cystograms as ordered; arranging processing; presenting for review as taken and continuing as ordered; having pt. returned; placing cystograms for use; recording.	2
391	Selecting and assembling radiographs and related case history information for use in case conference in diagnostic radiology by deciding on or ascertaining subject area and details to be stressed; screening available sources of radiographs; selecting appropriate examples for use and assembling related information and records; discussing choice if appropriate; returning materials and placing selected materials for use.	1
392	Planning and presenting cases and/or related lectures on diagnostic radiology and pathology to pathologists, radiologists and residents by selecting or ascertaining content and arranging to assemble appropriate case history materials; planning presentation; making presentation of case histories, related problems, and/or related lecture; participating in discussion.	1
393	Reviewing and selecting current and/or inactive radiographs for instructional use by viewing and reading related medical records; evaluating for instructional characteristics; selecting appropriate films and placing for use in instruction; placing discarded inactive radiographs for recycling.	1

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394	Comparing prior radiographic diagnoses with later pathology and/or autopsy reports and reporting discrepancies to appropriate radiologists by determining discrepancies; attempting to ascertain reasons for differences by review of patient records and reading of radiographs and diagnostic reports; reporting differences and observations to radiologists as appropriate.	1
395	Conducting a radiographic air contrast study of stomach of any non-pediatric patient by deciding whether to go ahead based on patient's condition and scout film; reassuring patient; supervising oral administration of air and of barium mixture; viewing on fluoroscope monitor and taking spot films as decided; ordering radiographs; deciding when examination is completed by viewing radiographs; recording medical impressions, follow up care and/or delayed films; notifying MD of emergency signs.	1
396	Deciding on type of neuroradiologic procedure(s) to order for any patient in consultation with referring physician and/or neurologist, by reviewing case history and relevant materials, discussing, considering contraindications and need; approving, recommending alternative studies, postponement, and/or refusing approval; dictating reasons for refusal if requested; if approved, recommending method, technique, anesthetic, patient preparation; recording orders and recommendations; placing for scheduling and/or typing; expediting if appropriate.	1
397	Conducting cerebral angiography of any patient by examining, reassuring pt., obtaining consent; deciding on method, technique, site, preparation; deciding whether to go ahead, manual or automatic pressure injection, rate, speed for serial filming; injecting local anesthetic; making puncture and advancing needle or catheter and guide wire under fluoroscopic control; coordinating injection of contrast and filming; ordering magnification, subtractions; evaluating cerebral angiograms; ordering additional injections as appropriate; removing instruments; ordering after care; recording orders, medical impressions.	1
398	Conducting pneumoencephalography of any patient by deciding whether to go ahead; deciding on technique, based on review of current condition and cursory neurological examination; reassuring pt.; checking technical quality of scout film; injecting local anesthetic; inserting spinal tap needle; removing fluid; injecting air contrast medium and adjusting amount by assessing radiographs; deciding on additional views, tomography; deciding when examination is complete by viewing radiographs; recording medical impressions and needed nursing follow-up.	1

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399	Cooperating with surgeon in conducting brain ventriculography of any patient by deciding with surgeon whether to go ahead based on review of current condition and cursory neurological examination, amount of air contrast to inject; ordering and viewing air contrast ventriculograms; deciding with surgeon whether to order tomography and/or positive contrast study based on review of processed radiographs; deciding with surgeon on amount of iodized oil to inject; ordering and viewing positive contrast ventriculograms; deciding with surgeon when examination is completed; recording medical impressions.	1
400	Conducting positive contrast myelography of any patient by deciding whether to go ahead, and on technique, based on review of current condition and examination; reassuring pt.; injecting local anesthetic; inserting spinal tap needle with fluoroscopic check; removing spinal fluid; injecting iodized oil contrast medium; observing and directing flow using tilt table and fluoroscopic control; taking spot films; ordering myelograms; approving complete set of myelograms; removing contrast medium with gravity, suction and/or additional spinal puncture; recording medical impressions and needed follow-up care.	1
401	Conducting air contrast myelography of any patient by deciding whether to go ahead; deciding on technique, based on review of current condition and cursory neurological examination; reassuring pt.; checking technical quality of scout film; injecting local anesthetic; inserting spinal tap needle, removing fluid; injecting air as contrast medium; ordering and assessing myelograms; deciding on additional views; ordering and assessing tomograms; deciding when examination is complete; recording medical impressions and needed nursing follow-up.	1
402	Conducting mammographic examination of any patient's breasts, by reviewing history, physically examining; deciding on views to have taken; reassuring patient; ordering radiographs; evaluating radiographs or xeroradiographs for technical quality and deciding when there is a completed set; recording medical impressions; notifying MD of emergency signs.	1
403	Reading, interpreting and making recommendations on mammographic materials, or giving opinions to co-workers by reviewing medical information and requisition sheet, evaluating new and old films; notifying ordering physician of emergency signs; explaining opinions or dictating findings and recommendations; and placing report for typing.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
404	Reading, interpreting and making recommendations on neuroradiographic materials, and/or giving opinions to clinicians or co-workers by reviewing medical information and requisition sheet(s); evaluating current and prior radiographs, computerized transverse axial tomographic scans on display tube, photographs of scans, or as computer print-outs; evaluating in connection with clinical data; notifying referring physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1
405	Providing clinical training for radiology residents in neuroradiology procedures by demonstrating procedures, explaining what is being done, answering questions; deciding when residents can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1
406	Providing clinical training for radiology residents in mammography procedures by demonstrating procedures, explaining what is being done, answering questions; deciding when residents can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1
407	Planning and presenting lectures or case conferences on neuroradiology for radiology residents by deciding on content, method of presentation; preparing material; presenting lecture, being aware of responses and adjusting presentation to students' needs; using radiographic material in question and answer format to demonstrate aspects of topics for instructional purposes.	1
408	Participating in meetings of radiologists, surgeons and neurologists to discuss new developments, cases of interest and case problems in the fields of neurology, surgery and neuroradiology by planning and presenting new developments in the radiologic field, interesting case studies, or problems in current cases, and/or by deciding to listen to presentations about new developments in surgery, interesting case studies or case problems, and participating in discussions.	1
409	Deciding on type of respiratory radiographic examination(s) to order for any patient in consultation with referring physician and/or specialists, by reviewing case history and relevant materials, discussing, and deciding what procedure(s), if any, to	1

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409	(continued) order; recommending appropriate techniques; deciding on anesthetic, preparatory patient procedures; recording decisions and recommendations; arranging for scheduling.	
410	Conducting bronchoscopy and related biopsy and secretion sampling of any non-pediatric patient by deciding whether to go ahead; reassuring pt.; anesthetizing pt. with topical anesthetic; inserting flexible bronchoscope using nasopharyngeal airway; giving emergency care if needed; inspecting lungs, bronchi with bronchoscope; deciding on, obtaining brush, clamp or forcep biopsy samples, secretion samples, spot films, photographs using access opening in bronchoscope under fluoroscopy; deciding when examination is completed, whether to order bronchography; recording medical impressions, orders, follow-up care; notifying MD of emergency signs.	1 1
411	Conducting bronchography of any non-pediatric patient by deciding whether to go ahead; reassuring pt.; anesthetizing pt. with topical anesthetic; inserting transnasotracheal catheter and instilling iodized oil contrast medium into bronchus under fluoroscopy; viewing on TV monitor and taking spot films; deciding whether to study other bronchus; ordering bronchograms; deciding when examination is completed by viewing bronchograms; deciding whether to order delayed films and/or bronchography of other side; recording medical impressions, orders and follow-up care; notifying MD of emergency signs.	1
412	Conducting laryngography of any non-pediatric patient by deciding whether to go ahead; reassuring pt.; instructing pt. in maneuvers to be made in examination; taking scout spot films; anesthetizing pt. with topical anesthetic; instilling iodized oil contrast medium into larynx under fluoroscopy; having patient make test sounds; observing; taking spot films and cine while watching on fluoroscope monitor; deciding when examination is completed by viewing spot films; recording medical impressions and follow-up care; notifying MD of emergency signs.	1
413	Conducting aspiration or tissue needle biopsy of the lung of any non-pediatric patient by deciding whether to go ahead; reassuring patient; selecting site; deciding on technique; injecting local anesthetic; inserting biopsy needle under fluoroscopy; aspirating or cutting tissue sample as decided; having sample(s) prepared for lab; ordering and viewing radiographs and samples; providing for care for bleeding or pneumothorax if needed; recording medical impressions, delayed films, follow-up care; notifying MD of emergency signs.	1

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414	Reading, interpreting and making recommendations on radiographic materials involving bronchi, lungs, trachea and/or larynx, or giving opinions to co-workers by reviewing medical information and requisition sheet(s); evaluating new and old films; notifying ordering physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1
415	Planning and presenting lectures or case conferences on pulmonary, tracheal, bronchial and laryngeal radiology for radiology residents by deciding on content, method of presentation; preparing material; presenting lecture, being aware of responses and adjusting presentation to students' needs; using radiographic material in question and answer format to demonstrate aspects of topics for instructional purposes.	1
416	Providing clinical training for radiology residents in radiographic procedures of lungs, bronchi, trachea and/or larynx by demonstrating procedures, explaining what is being done, answering questions; deciding when residents can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1
417	Planning and presenting lectures on pulmonary, bronchial, tracheal and laryngeal radiography for medical students by deciding on content, method of presentation; preparing material; presenting lecture, being aware of responses, and adjusting presentation to students' needs.	1
418	Deciding on type of obstetrical radiographic procedures to order for pregnant patient in consultation with referring obstetrician by reviewing case history and relevant materials, discussing lab reports, indications; considering contraindications and need; approving, recommending alternative studies, and/or refusing approval; if approved, recommending technique, sedation, patient preparation; recording orders and recommendations; placing for scheduling and/or typing.	1
419	Calculating and interpreting radiographic pelvimetry using Colcher-Sussman technique by constructing centimeter scales from radiographs; measuring maternal pelvic and fetal-head diameters on radiographs; calculating totals and averages; noting and assessing compatability of dimensions, appearance, condition and position of pelvic and fetal structures; recording	1

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419	(continued) findings; assessing feasibility of normal vaginal or forceps delivery; noting presence of maternal or fetal abnormalities; discussing with obstetrician; recording findings and dictating report if appropriate; placing for filing and/or typing.	
420	Conducting intrauterine fetal radiography for intrauterine transfusion in consultation with obstetrician by discussing and mutually deciding whether to go ahead; reassuring pt.; localizing fetus using grid for radiography after prior injection of contrast medium by obstetrician; deciding entry site; collaborating in use of local anesthetic, placement of transfusion needle; checking needle placement with test injection of contrast solution and radiography; approving final placement; assisting with introduction of catheter; giving final approval of placement for transfusion or recommending postponement, follow-up care.	1
421	Deciding on type of gynecological radiographic procedures to order for non-pediatric female patient in consultation with referring physician by reviewing case history and relevant materials, discussing lab reports, indications; considering contraindications and need; approving, recommending alternative studies, and/or refusing approval; if approved, recommending technique, medication, patient preparation; recording orders and recommendations; placing for scheduling and/or typing.	1
422	Reading, interpreting and making recommendations on obstetrical and/or gynecological radiographic studies and related material or giving opinions to clinicians or co-workers by reviewing relevant medical information and requisition sheet(s); evaluating current and prior films and collateral materials; notifying referring physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1
423	Participating in meetings of radiologists, obstetricians, and gynecologists to discuss new developments, cases of interest and case problems of mutual interest by planning and presenting new developments in the radiologic field, interesting case studies or problems in current cases and/or by deciding to listen to presentations about new developments, interesting case studies or case problems, and participating in discussions; leading conference sessions when appropriate.	1

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424	Providing clinical training for radiology residents in obstetrical and gynecological radiographic procedures by demonstrating procedures, explaining what is being done, answering questions; deciding when residents can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1
425	Planning and presenting lectures or case conferences on obstetrical and gynecological radiology for radiology residents by deciding on content, method of presentation; preparing material; presenting lecture, being aware of responses and adjusting presentation to students' needs; using radiographic material in question and answer format to demonstrate aspects of topics for instructional purposes.	1
426	Conducting percutaneous antegrade pyelography of any non-pediatric patient by deciding whether to go ahead; reassuring pt.; deciding on site of entry; localizing site with contrast IV and fluoroscopy; inserting teflon puncture needle in kidney with fluoroscopic control; aspirating urine; attaching drainage tube; injecting iodine based contrast solution; conducting fluoroscopy; taking spot films; ordering radiographs; deciding when examination is completed by viewing pyelograms; aspirating contrast; leaving drainage tube in place, suturing, or removing; discussing with surgeon; sending specimen to lab; recording medical impressions, orders for follow-up care.	1
427	Conducting retrograde venography of the internal jugular veins, posterior fossa dural sinus system and/or orbit of any patient by examining, reassuring pt.; deciding whether to go ahead; deciding on technique; injecting local anesthetic; applying compression; inserting needle and catheter bilaterally in internal jugular veins using Seldinger technique; checking for location and obstruction with fluoroscopic control; injecting iodine based contrast solution and ordering seriography for appropriate projections; ordering subtractions; approving final set of radiographs; ordering after care; recording, reporting medical impressions.	1
428	Conducting orbital and/or cavernous sinus venography of any patient by frontal vein route by examining, reassuring patient; deciding whether to go ahead; deciding on technique; injecting local anesthetic; applying compression; inserting needle in frontal vein; injecting test dose and selecting compression under fluoroscopic control; having compression applied and in-	1

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428	(continued) jecting iodine based contrast solution with simultaneous seriography for appropriate projections; ordering subtractions; approving final set of radiographs; ordering after care; recording medical impressions.	
429	Conducting selective spinal cord angiography of any patient by examining, reassuring pt.; deciding whether to go ahead; deciding on technique and prior preparation; injecting local anesthetic and puncturing femoral artery using Seldinger technique; checking catheter placement under fluoroscopic control; injecting aqueous iodine based contrast under pressure and taking serial films; evaluating arteriograms and deciding on additional selective opacification; repeating steps as appropriate; providing emergency care; approving final set of angiograms; removing catheter; ordering after care, delayed films; recording medical impressions.	1
430	Conducting positive contrast posterior fossa myelography of any patient by deciding whether to go ahead, and on technique based on review of condition and examination; reassuring; injecting local anesthetic; inserting spinal tap needle under fluoroscopic control; removing spinal fluid; injecting iodized oil contrast; directing flow to craniospinal, posterior fossa areas of interest by using tilt table and fluoroscopic control; taking spot films; viewing and approving myelograms; removing contrast medium; recording medical impressions and needed nursing follow-up; notifying surgeon of obstructing lesions or tumors.	1
431	Conducting discography of any patient by deciding whether to go ahead, on technique and entry site based on review of current condition, examination and scout films; reassuring pt.; injecting local anesthetic; inserting spinal tap needle under fluoroscopic control; injecting aqueous iodine based contrast into disc by syringe and a second needle, through puncture needle, under fluoroscopic control; ordering discography; deciding when examination is completed by viewing discograms; recording medical impressions and needed nursing follow-up.	1
432	Directing skull tomography of any patient by deciding whether to proceed; reassuring; reviewing preliminary films; selecting positions, levels, number and distances of tomogram "cuts"; reviewing tomograms and continuing as appropriate; deciding when examination is completed; recording medical impressions and needed nursing follow-up.	1

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433	Conducting sialography of any patient by deciding whether to go ahead; examining and reassuring pt.; viewing preliminary films, deciding on technique; dilating appropriate salivary ducts; inserting hollow cannula and instilling iodized oil contrast medium; ordering overhead films; viewing sialograms and deciding whether to examine other glands; approving complete set of sialograms; giving lemon slices to remove contrast; ordering delayed films; recording medical impressions and needed follow up; notifying MD of emergency signs.	1
434	Reading, interpreting and making recommendations on sialography and related materials or giving opinions to co-workers by reviewing medical information and requisition sheet(s); evaluating new and old films; notifying ordering clinician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1
435	Providing clinical training for radiology residents in ear, nose and throat radiography and sialography by demonstrating procedures, explaining what is being done, answering questions; deciding when residents can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1
436	Conducting positive contrast arthrography (especially of knee) of any patient by examining and deciding whether to go ahead; reassuring pt.; deciding on technique; infiltrating local anesthetic subcutaneously; making needle puncture into joint space; checking needle placement by noting resistence to injection of anesthetic; aspirating joint fluid; instilling water soluble contrast solution under fluoroscopic control; taking spot films of joint under distension and stress; ordering overheads as decided; approving complete set of arthrograms; recording medical impressions and follow-up care; notifying MD of emergency signs.	1
437	Reading, interpreting and making recommendations on orthopedic radiographs and/or arthrograms and related studies of bones and joints or giving opinions to clinicians or co-workers by reviewing relevant medical information and requisition sheet(s); evaluating current and prior films and collateral diagnostic materials; notifying referring physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1

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438	Providing clinical training for radiology residents in orthopedic radiology and arthrography by demonstrating procedures, explaining what is being done, answering questions; deciding when residents can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1
439	Ordering or approving changes in technical factor selector settings to compensate for a change in quality of x-ray machine output by comparing penetrometer standard test films with current test films; evaluating perceived differences; estimating discrepancy in settings; considering recommended changes; ordering change as decided.	3
440	Directing computerized transverse axial tomography of the skull and brain of any patient by deciding whether to proceed; reassuring pt.; selecting levels, angles, thickness of slices for scans; viewing cathode ray tube, and/or photographs of scan displays, and/or numerical print-out of absorption coefficients; interpreting; deciding whether to repeat, inject or infuse contrast intravenously; continuing as decided with IV; deciding when examination is completed by viewing transverse axial scans; recording medical impressions and needed nursing follow-up.	1
441	Deciding on type of pediatric radiographic examination(s) to order for pediatric patient in consultation with referring physician and/or pediatric specialist, by reviewing case history and relevant materials, discussing, considering indications, contraindications, alternatives and deciding what procedure(s), if any, to order; or referring clinician to other specialist; deciding whether to order adult or pediatric procedure; specifying views, prior procedures, medication, preparation; requesting additional tests or information; recommending technique, contrast medium; recording decisions and recommendations; arranging for scheduling.	1
442	Conducting choanal radiography of pediatric patient by conducting clinical test for choanal atresia by attempting to insert catheter into nasopharynx; deciding whether to go ahead; reassuring accompanying adult; having anesthesiologist present; deciding on technique; instilling contrast medium through nasopharyngeal tube to point of obstruction; monitoring with fluoroscopy and taking spot films, and/or ordering overheads; determining whether choanal atresia diagnosis is confirmed; informing referring MD of need for immediate surgery; recording medical impressions and needed follow-up care.	1

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443	Conducting bronchography of pediatric patient in consultation with pediatrician(s) and anesthesiologist by jointly considering whether to go ahead; deciding on technique; instilling contrast medium into bronchus with injecting catheter through previously inserted endotracheal tube under fluoroscopic control; taking spot films and/or ordering bronchograms; viewing and jointly deciding whether to study other bronchus; removing contrast medium with gravity and aspiration; cooperating in giving emergency care; ordering delayed films; recording as appropriate.	1
444	Conducting intravenous excretory urography (IVP) and inferior vena cavography of pediatric patient by checking scout film, reassuring pt.; deciding whether to go ahead; deciding on infusion or injection technique, amount of contrast; applying tourniquets for vena cavography; injecting or infusing iodine based contrast medium in appropriate vein; observing reactions and deciding on whether to proceed; administering full dosage and/or providing emergency care; ordering overhead films and special views when appropriate; viewing and approving complete set of radiographs; ordering delayed films, follow-up care; recording medical impressions; notifying MD of emergency signs.	1
445	Conducting retrograde voiding cystourethrography of pediatric patient by deciding whether to go ahead; reassuring patient; having patient catheterized; selecting contrast solution; instilling contrast medium through catheter with drip; ordering pre-voiding radiographs; having patient void; ordering voiding and post-voiding radiographs; deciding when examination is completed by viewing radiographs; ordering delayed films; recording medical impressions and needed nursing follow-up; reporting emergency signs to MD.	1
446	Conducting radiography of external fistula or sinus tract of any patient by deciding whether to go ahead; examining; deciding on technique; inserting and/or attaching syringe or catheter for injection of contrast medium using sterile procedure; fitting to occlude orifice; injecting contrast medium into tract under fluoroscopic control; spot filming sequentially; ordering overhead films; assessing radiographs and deciding on double contrast; injecting multiple tracts; deciding when examination is complete by viewing radiographs; removing contrast material; recording medical impressions, needed nursing follow-up.	1

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447	Conducting vaginography of pediatric patient for intersex condition by deciding whether to go ahead; examining; deciding on technique; inserting and/or attaching syringe or catheter for injection of contrast medium using sterile procedures; injecting contrast medium into opening(s) under fluoroscopic control; spot filming sequentially and ordering overhead films; assessing radiographs and deciding on double contrast, injection of multiple openings; deciding when examination is complete by viewing radiographs; removing contrast material; recording medical impressions and needed nursing follow-up.	1
448	Conducting percutaneous peritoneography/inguinal herniography of pediatric patient by deciding whether to go ahead; reassuring and examining patient; deciding on technique; instilling iodine based contrast solution transabdominally after checking needle placement; having patient moved to distribute contrast; ordering and assessing delayed films; ordering excretory urography if appropriate; deciding when examination is completed; recording orders, medical impressions, and nursing follow-up; notifying MD of emergency signs.	1
449	Reading and interpreting radiographs for bone-age study by comparing radiographs of bone with standard maturity indicators in atlas of age-of-appearance standards by sex; referring to current and/or serial radiographs; evaluating by use of age standards of a single body region, counting ossification centers, or by sampling-of-centers technique; assessing normality of bone maturation based on normal ranges; preparing report of assessment including recommendations on additional studies if warranted.	1
450	Evaluating plain films of pediatric gastrointestinal tract to localize obstructions and/or foreign bodies by reading and interpreting radiographs; deciding whether to order additional views, contrast studies; deciding whether to have foreign object(s) removed from upper esophagus under fluoroscopy; notifying referring MD of findings; recommending technique for contrast studies; ordering procedures as decided; recording medical impressions; arranging for scheduling.	1
451	Removing foreign object from pediatric upper esophagus under fluoroscopic control by reviewing clinical history and prior radiographs, deciding whether to go ahead; inserting Foley catheter into esophagus through nose under fluoroscopic control; inflating balloon with contrast medium; removing object	1

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451	(continued) by pulling back on catheter or deciding to terminate; providing emergency care; discussing with referring MD; ordering delayed films or alternative procedure; recording medical impressions and orders.	
452	Conducting esophageal radiography of pediatric patient by reassuring pt.; deciding on whether to go ahead; deciding on technique, contrast medium, amount, and route of introduction of contrast medium; inserting nasogastric catheter under fluoroscopic control; injecting or supervising feeding of contrast medium; taking spot films and/or cine film as decided; ordering overhead films; deciding when examination is complete by reviewing radiographs; removing contrast material and catheter; recording medical impressions, orders for follow-up care, delayed films; notifying MD of emergency signs.	1
453	Conducting radiographic barium study of upper gastrointestinal tract of pediatric patient by reassuring; deciding whether to go ahead, technique; inserting nasogastric tube; sampling gastric contents; instilling barium or having barium given orally, under fluoroscopic control; observing organs; spot filming, taking cine or videotape films; taking pressure spot films of stomach; ordering overhead radiographs; deciding on air contrast of stomach, delayed small bowel films; carrying out air contrast instillation and filming; viewing radiographs, approving complete set; recording medical impressions, orders for care; notifying MD of emergency signs.	1
454	Conducting a radiographic barium enema study of lower gastrointestinal tract of pediatric patient by deciding whether to go ahead; reassuring pt.; deciding on contrast material; supervising or conducting administration of enema; viewing on fluoroscope monitor; taking spot films; ordering overhead radiographs; ordering post-evacuation films; supervising or conducting air contrast enema if so decided; deciding when examination is completed by viewing radiographs; ordering delayed films; recording medical impressions, orders for follow-up care; notifying MD of emergency signs.	1
455	Conducting defecography of pediatric patient by deciding whether to go ahead; reassuring pt.; deciding on contrast material; supervising or conducting administration of enema; viewing on TV monitor; taking cine, spot films or videotape; ordering radiographs; supervising evacuation; taking cine or video and spot films; order post-evacuation films; deciding when examination is completed by viewing radiographs; recording medical impressions, orders for follow-up care; notifying MD of emergency signs.	1

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456	Conducting diagnosis and hydrostatic reduction of intussusception of pediatric patient by examining pt., scout films; deciding whether to go ahead; reassuring pt.; administering barium enema under fluoroscopic control; spot filming; locating and diagnosing intussusception; deciding with surgeon whether to proceed with therapeutic pressure; applying hydrostatic pressure with enema under fluoroscopic control; deciding with surgeon to repeat or terminate; ordering radiographs, post-evacuation films; approving complete set of radiographs; recording medical impressions, follow-up care; notifying MD of emergency signs.	1
457	Conducting fluoroscopic inspiration-expiration examination of pediatric patient by deciding whether to go ahead; reviewing history; reassuring pt.; observing inspiration and expiration under fluoroscopic control; deciding whether to take spot films and/or cine or videotape record; looking for evidence of pathology or foreign body; showing radiographic record and discussing with surgeon if appropriate; recording medical impressions, orders, follow-up care; notifying MD of emergency signs.	1
458	Reading, interpreting and making recommendations on radiographic and related studies of pediatric patients or giving opinions to clinicians or co-workers by reviewing relevant medical information and requisition sheet(s); evaluating current and prior films and collateral diagnostic materials for medical and developmental information; notifying referring physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1
459	Participating in meetings of radiologists, surgeons and pediatricians to discuss new developments, cases of interest, and case problems in the field of pediatric surgery and radiology by planning and presenting new developments in the radiologic field, interesting case studies, or problems in current cases, and/or deciding to listen to presentations about new developments in surgery, interesting case studies, or case problems, and participating in discussions; leading conference sessions when appropriate.	1
460	Providing clinical training for radiology residents in pediatric radiography by demonstrating procedures, explaining what is being done, answering questions; deciding when residents can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1

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461	Planning and presenting lectures or case conferences on pediatric radiology for radiology residents by deciding on content, method of presentation; preparing material; presenting lecture, being aware of responses and adjusting presentation to students' needs; using radiographic material in question and answer format to demonstrate aspects of topics for instructional purposes.	1
462	Planning and presenting lectures on pediatric radiology for medical students by deciding on content, method of presentation; preparing material; presenting lecture, being aware of responses, and adjusting presentation to students' needs.	1
463	Taking retrograde pyelograms and ureterograms of non-pediatric patient by reviewing request; arranging for transport, cleaning equipment; preparing for serial or stereoscopic radiography, if ordered; measuring part; positioning equipment and cassette holders and/or patient; selecting and setting exposure factors for scout and contrast films; collimating; providing shielding; observing sterile procedures; instructing patient in breath control; making exposures; arranging for processing and viewing by urologist; continuing as ordered; recording examination.	2
464	Providing technical assistance for an examination of any patient requiring fluoroscopic control and spot filming, by reviewing request; preparing equipment; setting factors for fluoroscopy, spot filming; identifying films; providing shielding; assisting with positioning of patient, tube, table; arranging for processing; recording examination.	2
465	Taking pelvic pneumograms and/or hysterosalpingograms of non-pediatric female patient by reviewing request; preparing equipment; measuring pt.; taking scout film; assisting with induced pneumoperitoneum, instillation of contrast, fluoroscopy, spot films, video as ordered; setting technical factors; identifying film; positioning pt.; providing shielding; collimating; taking pelvic pneumograms, hysterosalpingograms as ordered; arranging for processing; presenting for review; continuing as ordered; having pt. returned or sent for recovery; placing radiographs for use; recording examination.	2
466	Taking radiographs of a pregnant patient's abdomen for fetography, amniography, placentography, by reviewing request; reporting observed contraindications; reassuring, measuring pt.; instructing in breath control; selecting and setting technical factors; identifying film; positioning pt. and equipment; colli-	2

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466	(continued) mating; making exposure; having radiograph processed and reviewed; repeating or continuing as ordered; having pt. returned; placing radiographs for use; recording examination.	
467	Taking radiographs of a pregnant patient's uterus for intrauterine transfusion, by reviewing request; cleaning equipment; reassuring, measuring pt.; instructing in breath control; selecting and setting technical factors; placing metal grid as ordered; identifying film; positioning pt. and equipment; collimating; making exposure; having radiograph processed and reviewed; repeating or continuing for needle check using sterile procedures as ordered; recording examination; placing radiographs for use.	2
468	Taking radiographs of a pregnant patient's pelvis for Colcher-Sussman pelvimetry, by reviewing request; reporting observed contraindications; reassuring, measuring pt.; instructing in breath control; selecting and setting technical factors; identifying film; positioning pt., Colcher-Sussman pelvimeter and equipment; collimating; making exposures; having radiographs processed and reviewed; repeating or continuing as ordered; having pt. returned; placing radiographs for use; recording examination.	2
469	Deciding on type of non-neurologic angiography procedure to order for any patient in consultation with referring physician, surgeon, and/or other specialist, by reviewing case history and relevant materials, discussing, considering contraindications and need; approving, recommending alternative studies, postponement, and/or refusing approval; dictating reasons for refusal if requested; if approved, recommending site, route, technique, anesthetic, patient preparation; recording orders and recommendations; placing for scheduling and/or typing; expediting if appropriate.	1
470	Conducting peripheral arteriography of any patient by percutaneous selective catheterization or direct needle puncture, by examining, reassuring pt., obtaining consent; deciding on method, technique, site, preparation; deciding whether to go ahead, pressure, timing for contrast injection, rate, speed for serial filming; injecting local anesthetic; making puncture and advancing needle or catheter and guide wire under fluoroscopic control; coordinating pressure injection of contrast and filming; evaluating; ordering, approving additional injections and arteriograms as appropriate; providing emergency care; removing instruments; ordering after care, tests; recording orders, medical impressions.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
471	Conducting ascending or descending venography of lower extremities of any patient by direct needle puncture by examining, reassuring pt.; deciding on whether to go ahead, method, site; obtaining consent; deciding on materials, contrast, type of injection, filming program; injecting anesthetic; inserting puncture needle; applying compression, weights, exercise, straining by pt. as appropriate; injecting contrast; ordering serial films; evaluating venograms; continuing as decided; providing emergency care; removing instruments; ordering care, tests; recording orders, medical impressions.	1
472	Conducting catheter thoracic aortography of any patient by examining, reassuring pt.; obtaining consent; deciding on route, technique, site, prior preparation; deciding whether to go ahead, pressure, timing for contrast injection, rate, speed for serial filming; injecting anesthetic; making puncture and advancing catheter and guide wire under fluoroscopic control; coordinating pressure injection of contrast and filming; evaluating and ordering, approving additional injections and angiograms as appropriate; providing emergency care; removing instruments; ordering after care, tests, delayed films; recording orders, medical impressions.	1
473	Conducting catheter abdominal aortography and/or selective visceral arteriography of any patient by examining, reassuring pt.; obtaining consent; deciding on site, route, technique, prior preparation; deciding whether to go ahead, pressure for contrast injection, type of filming, special techniques; injecting local anesthetic; making puncture(s); advancing catheter and guide wire under fluoroscopic control; coordinating pressure injection of contrast and filming; evaluating aortograms; deciding on selective, superselective catheterization, pharmacoangiography as appropriate; providing emergency care; removing instruments; ordering after care, tests, delayed films; recording orders, medical impressions.	1
474	Conducting percutaneous translumbar abdominal aortography of any patient by examining, reassuring pt.; obtaining consent; deciding on technique, site, prior preparation; deciding whether to go ahead, type of injection, filming; injecting local anesthetic; puncturing aorta; advancing needle; testing placement; coordinating pressure injection of contrast and filming; evaluating; ordering additional injections, reviewing arteriograms as appropriate; providing emergency care; removing instruments; ordering after care, tests, delayed films; recording orders, medical impressions.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
475	Conducting percutaneous splenoportography of any patient by examining, reassuring pt.; obtaining consent; deciding whether to go ahead, prior preparation, site of entry; injecting anesthetic; inserting teflon puncture needle into spleen using fluoroscopy; checking entry; injecting iodine-based contrast solution and ordering serial filming; deciding whether to continue, deciding when examination is completed by viewing splenoportograms; providing emergency care; removing instruments; ordering after care, tests, delayed films; recording orders, medical impressions.	1
476	Conducting selective pelvic arteriography of non-pediatric gravid or nongravid female patient by examining, reassuring pt.; obtaining consent; deciding on site, technique, prior preparation; deciding whether to go ahead, pressure injection, filming; injecting local anesthetic; making puncture; advancing catheter and guide wire; coordinating pressure injection of contrast and filming; evaluating angiograms; deciding on aortography, selective catheterization, repeat of injection as appropriate; providing emergency care; removing instruments; ordering after care, tests, delayed films; recording orders, medical impressions.	1
477	Conducting catheter pulmonary angiography of any patient by examining, reassuring pt., obtaining consent; deciding on route, technique, injection site, prior preparation; deciding whether to go ahead, pressure for injection, type filming; injecting local anesthetic; making puncture or cut down; advancing catheter and guide wire under fluoroscopic control; making test dose, cardiac and pulmonary pressure readings; coordinating injection and filming; evaluating angiograms; deciding whether to repeat, do selective pulmonary catheterization; assisting with emergency care; removing instruments; suturing cut down; ordering after care, tests, delayed films; recording orders, medical impressions.	1
478	Conducting selective bronchial arteriography of any patient by examining, reassuring pt.; obtaining consent; deciding on route, technique, prior preparation, whether to go ahead, type of injection, filming, magnification, subtraction; injecting local anesthetic; making puncture; advancing catheter, guide wire under fluoroscopic control to aorta; catheterizing bronchial branches under fluoroscopy and test injections; coordinating injection of contrast and filming; evaluating; deciding on continued selective catheterization as appropriate; providing care; removing instruments; ordering after care, tests, delayed films; recording orders, medical impressions.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
479	Conducting selective thyroid angiography of any patient by examining, reassuring pt.; obtaining consent; deciding on site, route, technique, prior preparation; deciding whether to go ahead, type of injection, filming; injecting local anesthetic; making puncture; advancing catheter and guide wire under fluoroscopic control; coordinating injection of contrast and filming; evaluating angiograms; deciding on selective catheterization as appropriate; continuing; ordering emergency care; removing instruments; ordering after care, tests, delayed films; recording orders, medical impressions.	1
480	Conducting selective subclavian arteriography of any non-pediatric patient to evaluate thoracic outlet syndrome by examining, reassuring pt.; obtaining consent; deciding whether to go ahead, types of maneuvers, positions; injecting local anesthetic; making puncture; advancing catheter and guide wire under fluoroscopic control; coordinating pt. maneuver, injection of contrast and serial filming; evaluating arteriogram series; ordering emergency care; removing instruments; ordering after care, tests, delayed films; recording orders, medical impressions.	1
481	Conducting intravenous angiocardiography of any patient by percutaneous selective catheterization or direct needle puncture, by examining, reassuring pt., obtaining consent; deciding on method, technique, site, preparation; deciding whether to go ahead; deciding serial program based on circulation time; deciding type of injection, pressure, materials, contrast; injecting local anesthetic; making puncture; advancing needle, or catheter and guide wire under fluoroscopic control; coordinating injection of contrast and filming; evaluating angiograms; ordering, approving additional injections and angiograms as appropriate; ordering emergency care; removing instruments; ordering after care, tests, delayed films; recording orders, medical impressions.	1
482	Conducting catheter vena cavography and/or selective renal or adrenal venography of any non-infant patient by examining, reassuring pt.; obtaining consent; deciding on site, route, technique, prior preparation, whether to go ahead, type of injection, filming; injecting local anesthetic; making punctures; advancing catheter and guide wire with fluoroscopic control; injecting drugs for circulation time, function studies; taking pressure, blood samples; coordinating injection, filming; evaluating films; continuing; ordering emergency care; removing instruments; ordering after care, tests, delayed urography; recording orders, medical impressions.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
483	Conducting percutaneous coronary arteriography and/or left ventriculography of any patient by examining, reassuring pt.; obtaining consent; deciding on route, technique, prior preparation, whether to go ahead, type of injection, filming; injecting local anesthetic; making puncture; advancing catheter and guide wire under fluoroscopic control to ascending aorta, left ventricle, left, right coronary arteries as decided while checking pressure, ECG and test dose response; coordinating injection and filming; evaluating; continuing; assisting with emergency care; removing instruments; ordering after care, tests, delayed films; recording orders, medical impressions.	1
484	Reading, interpreting and making recommendations on non-neurologic angiographic and related studies and/or giving opinions to clinicians or co-workers by reviewing relevant medical information and requisition sheet(s); evaluating current and prior films and collateral diagnostic materials for medical information; notifying referring physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1
485	Participating in meetings of angiographers, vascular surgeons and cardiologists to discuss new developments, cases of interest, and case problems in the field of angiography, vascular and cardiovascular surgery by planning and presenting report on new developments in the radiologic field, interesting case studies, or problems in current cases; and/or by deciding to listen to presentations about new developments in surgery, interesting case studies, or case problems; participating in discussions; leading conference sessions when appropriate.	1
486	Providing clinical training for radiology resident in non-neurologic angiography by demonstrating procedures, explaining what is being done, answering questions; deciding when resident can perform tasks under direct supervision; observing and correcting; deciding when tasks can be done without direct supervision; spot checking and correcting; advising as requested or as deemed necessary.	1
487	Planning and presenting lectures or case conferences on non-neurologic angiography for radiology residents by deciding on content, method of presentation; preparing material; presenting lecture, being aware of responses and adjusting presentation to students' needs; using radiographic material in question and answer format to demonstrate aspects of topics for instructional purposes.	1

TASK CODE	EXTENDED TASK NAME	VOL. NO.
488	Directing computerized transverse axial tomography of the body of any patient by deciding whether to proceed; reassuring pt.; selecting levels, angles, thickness of slices for scans; viewing cathode ray tube, and/or photographs of scans display, and/or numerical print-out of absorption coefficients; interpreting; deciding whether to repeat, inject or infuse contrast intravenously; continuing as decided with IV; deciding when examination is completed by viewing transverse axial scans; recording medical impressions and needed nursing follow-up.	1
489	Reading, interpreting and making recommendations on non-neurological computerized transverse axial tomographic scans of the body, and/or giving opinions to clinicians or co-workers by reviewing medical information and requisition sheet(s); evaluating scans on display tube, photographs of displays, or as computer print-outs; evaluating in connection with clinical data; notifying referring physician of emergency signs; explaining opinions or dictating findings and recommendations; placing report for typing.	1
490	Mummying or wrapping an infant or young pediatric patient by obtaining, preparing materials following sanitary procedure; folding sheet; placing patient on sheet; folding sheet under and over limbs on either side; continuing wrapping; securing; indicating when completed as appropriate; reassuring patient.	3
491	Taking plain film radiographs of the skull of infant patient by reviewing request; reporting observed contraindications; reassuring pt., adult; measuring part; setting up for magnification technique, bilateral exposures, stereography as ordered; selecting and setting technical factors; identifying film; applying localization marks; positioning pt. and equipment; immobilizing pt.; providing shielding; collimating; making exposure; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
492	Taking plain film radiographs of vertebral column of infant patient by reviewing request; reporting observed contraindications; reassuring pt., adult; measuring part; setting up for magnification technique; selecting and setting technical factors; identifying film; positioning pt. and equipment; immobilizing pt.; providing shielding; collimating; making exposure; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2

TASK CODE	EXTENDED TASK NAME	VOL. NO.
493	Taking plain film radiographs of the upper extremities of infant patient by reviewing request; reporting observed contraindications; reassuring pt., adult; measuring parts; setting up for magnification technique; selecting and setting technical factors; identifying film; positioning pt. and equipment; immobilizing pt.; providing shielding; collimating; making exposures; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
494	Taking radiographs of neck, chest of infant patient by reviewing request; arranging transport, cleaning mobile unit; reporting observed contraindications; reassuring pt., adult; measuring parts; setting for magnification; using isolation technique; selecting, setting technical factors; identifying film; positioning pt.; applying, feeding barium; immobilizing pt.; providing shielding; collimating; making exposures; having radiographs processed, reviewed; repeating, continuing as ordered; having pt., equipment returned; recording exam; placing radiographs for use.	2
495	Taking plain film radiographs of abdomen of infant patient by reviewing request; reporting observed contraindications; reassuring pt., adult; measuring parts; following sanitary technique; selecting and setting technical factors; identifying film; positioning pt. and equipment; immobilizing pt.; providing shielding; collimating; feeding barium to pt.; making exposure; having radiographs processed and reviewed; repeating or continuing as ordered; having pt. returned; placing radiographs for use; recording examination.	2
496	Taking plain film radiographs of the lower extremities of infant or pediatric patient by reviewing request; reporting observed contraindications; reassuring pt., adult; measuring parts; setting up for magnification technique; selecting and setting technical factors; identifying film; positioning pt. and equipment for recumbent or erect exposure; immobilizing pt.; providing shielding; collimating; making exposures; having radiographs processed and reviewed; repeating for full set of views or as ordered; having pt. returned; placing radiographs for use; recording examination.	2
497	Taking radiographs for choanal atresia study of infant patient, by reviewing request; preparing equipment; measuring part; setting up for fluoroscopy, spot filming; setting technical factors; identifying films; providing shielding; taking scout	2

(continued)

TASK CODE	EXTENDED TASK NAME	VOL. NO.
497	(continued) films; assisting radiologist using sterile technique in positioning pt., instillation of contrast, fluoroscopy, spot filming; taking overhead radiographs as ordered; arranging for processing; assisting with removal of contrast; having pt. returned; placing radiographs for use; recording.	
498	Taking bronchograms of a pediatric patient, by reviewing request; preparing equipment; following sterile technique; measuring patient; setting up for fluoroscopy and spot filming; setting technical factors; identifying films; providing shielding; collimating; taking scout films as ordered; assisting with fluoroscopy, spot filming; taking overhead bronchograms as ordered; arranging for processing; taking to radiologist; continuing, repeating as ordered for second side; placing bronchograms for use; recording.	2
499	Taking upper GI radiographs of pediatric patient, by reviewing request; preparing equipment; preparing, reassuring, measuring pt.; setting up for fluoroscopy, spot filming, video, cine; setting technical factors; identifying films; collimating; providing shielding; making scout film; assisting with administration of contrast, positioning of pt., fluoroscopy, spot filming; taking overhead radiographs as ordered; arranging for processing; taking air contrast overheads of stomach, delayed film series as ordered; having pt. returned; placing radiographs for use; recording.	2
500	Taking barium enema, intussusception or defecography radiographs of pediatric patient by reviewing request; parparing equipment; reassuring, measuring pt.; setting up for fluoroscopy, spot filming, video, cine; taking scout films; setting technical factors; identifying films; providing shielding; collimating; inserting or assisting with enema, fluoroscopy, spot filming, defecation, air contrast; taking pre-post-evacuation, air contrast radiographs as ordered; arranging for processing, review and clean-up; having pt. returned; placing radiographs for use; recording examination.	2
501	Taking percutaneous peritoneograms/herniograms of pediatric patient by reviewing request; preparing equipment, pt.; measuring; setting up for fluoroscopy; taking scout films; assisting with puncture, injection of contrast, fluoroscopy; rocking pt.; setting technical factors; identifying films; providing shielding; collimating; taking overheads as ordered at proper times; arranging for processing; taking to radiologist; continuing, repeating as ordered for delayed film; having pt. returned; placing radiographs for use; recording examination.	2

TASK CODE	EXTENDED TASK NAME	VOL. NO.
502	Taking excretory intravenous inferior vena cavograms and urograms of pediatric patient, by reviewing request; preparing equipment; preparing, reassuring, measuring pt.; taking scout; assisting with test dose, injection or infusion of contrast; setting technical factors; identifying film; positioning pt.; providing shielding, collimating; taking inferior vena cavogram, series of postinjection, voiding and/or postmicturition urograms as ordered; arranging for processing; presenting for review as taken; continuing as ordered; having pt. returned; placing radiographs for use; recording.	2
503	Taking genitograms or fistulograms of any patient for intersex, external fistula or sinus tract examination by reviewing request; preparing equipment; reassuring, measuring pt.; setting up for fluoroscopy, spot filming; assisting with preparation of patient, fluoroscopy, spot filming; setting technical factors; identifying films; providing shielding; collimating; taking overheads as ordered; arranging for processing, clean up; assisting with removal of contrast; having pt. returned; placing radiographs for use; recording.	2
504	Taking cerebral angiograms or venograms of any patient, by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, serial filming single or biplane, magnification, subtraction technique, automatic injection of contrast; making scout films; assisting with sterile puncture, catheterization procedure; identifying films; applying shielding; collimating; setting technical factors; positioning, immobilizing pt.; making serial films in coordination with injection; having films processed, reviewed; repeating, adjusting as ordered; assisting with termination; placing radiographs for use; recording examination.	2
505	Taking pneumoencephalograms or brain ventriculograms of any patient by reviewing request, measuring, reassuring pt.; preparing pt. for procedure; making scout films; assisting with spinal puncture or surgical entry and injection of air or gas; setting up, immobilizing pt. for filming head in rotating PEG chair; identifying films; applying shielding; collimating; setting technical factors; setting up for stereography, tomography; making exposures in erect, brow-up and brow-down positions as ordered; having films processed, reviewed; repeating, adjusting; making positive contrast ventriculograms as ordered; assisting with termination; placing radiographs for use; recording examination.	2

TASK CODE	EXTENDED TASK NAME	VOL. NO.
506	Taking positive contrast spinal or posterior fossa myelograms of any patient by reviewing request; measuring, reassuring pt.; making scout films; preparing pt. for puncture; setting up for fluoroscopy, spot filming; assisting with puncture, fluoroscopy, spot filming; identifying films; collimating; applying shielding; setting technical factors; making overheads as ordered; having radiographs processed, reviewed; repeating, continuing as ordered; assisting with removal of contrast; terminating; placing radiographs for use; recording examination.	2
507	Taking diskograms of any patient by reviewing request; measuring, preparing, reassuring pt.; setting up for fluoroscopy; assisting with spinal puncture, fluoroscopy; identifying films; collimating; applying shielding; setting technical factors; making overheads as ordered (single or biplane); having radiographs processed, reviewed; repeating, continuing as ordered; placing radiographs for use; recording examination.	2
508	Taking air or gas contrast myelograms of any patient by reviewing request; measuring, reassuring, preparing pt. for puncture; setting up for fluoroscopy, overhead films, tomography; assisting with puncture, fluoroscopy; identifying films; collimating; applying shielding; setting technical factors; making overhead and tomographic exposures as ordered; having films processed, reviewed; repeating, continuing as ordered; placing radiographs for use; recording examination.	2
509	Taking spinal cord angiograms of any patient by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, serial filming (single or biplane), subtraction technique, automatic injection of contrast; making scout films; assisting with sterile puncture, catheterization procedure; identifying films; applying shielding; collimating; setting technical factors; positioning, immobilizing pt.; making serial films in coordination with injection; having films processed, reviewed; repeating, adjusting as ordered; placing radiographs for use; recording examination.	2
510	Taking peripheral angiograms of any patient (after percutaneous needle or catheter entry, translumbar puncture, ascending or descending venous entry), by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, conventional or serial filming (single or biplane), hand or automatic injection; making scout films; assisting with sterile puncture, catheterization; identifying films; shielding; collimating; setting technical factors; positioning, immobilizing pt.; making serial films of upper extremity or abdominal aorta, pelvis, lower	2

(continued)

TASK CODE	EXTENDED TASK NAME	VOL. NO.
510	(continued) extremity in coordination with injection; having films processed, reviewed; continuing, repeating, adjusting as ordered; assisting with termination; placing radiographs for use; recording exam.	
511	Taking catheter thoracic and/or abdominal aortograms of any patient, and/or selective visceral arteriograms (bronchial or abdominal), by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, serial filming (single or biplane), subtraction, magnification, spot filming, stereography, videotaping, manual or automatic injection; making scout films; assisting with sterile puncture, catheterization, vasoactive drugs; identifying films; applying shielding; collimating; setting technical factors; positioning, immobilizing pt.; making serial films in coordination with injection; having films processed, reviewed; continuing as ordered; placing angiograms for use; recording examination.	2
512	Taking selective pelvic angiograms of non-pediatric gravid or nongravid female patient by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, conventional or serial filming, hand or automatic injection; assisting with sterile puncture, catheterization; identifying films; applying shielding; collimating; setting technical factors; positioning, immobilizing pt.; making serial films in coordination with injection; having films processed, reviewed; continuing, repeating, adjusting as ordered; assisting with termination; placing radiographs for use; recording examination.	2
513	Taking intravenous angiocardiograms of any patient by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, serial filming (single or biplane), manual or automatic injection; making scout film(s); assisting with arm-to-tongue test, sterile puncture, catheterization; identifying films; applying shielding; collimating; setting technical factors; positioning, immobilizing pt.; making serial films in coordination with injection; having films processed, reviewed; repeating, adjusting as ordered; placing angiograms for use; recording examination.	2
514	Taking selective thyroid angiograms of any patient by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, serial filming (single, stereo or biplane), subtraction, manual or automatic pressure injection; making scout films; assisting with sterile puncture, catheterization; identifying films; applying shielding; collimating; setting technical factors; posi-	2

(continued)

TASK CODE	EXTENDED TASK NAME	VOL. NO.
514	(continued) tioning, immobilizing pt.; making serial films in coordination with injection; having films processed, reviewed; repeating, adjusting as ordered; placing angiograms for use; recording examination.	
515	Taking catheter inferior vena cavograms and/or renal or adrenal venograms of non-infant patient by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, single or biplane serial filming, manual or automatic injection; making scout film(s); assisting with arm-to-tongue test, sterile puncture, catheterization, blood sampling; identifying films; applying shielding; collimating; setting technical factors; positioning, immobilizing pt.; making serial films in coordination with injection; having films processed, reviewed; repeating, adjusting, continuing as ordered; placing angiograms for use; recording examination.	2
516	Taking percutaneous splenoportograms of any patient by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, serial filming; making scout films; assisting with sterile puncture, fluoroscopy; identifying films; applying shielding; collimating; setting technical factors; positioning, immobilizing pt.; making serial films in coordination with injection; having films processed, reviewed; repeating, adjusting as ordered; placing splenoportograms for use; recording examination.	2
517	Taking selective subclavian arteriograms of non-pediatric patient for thoracic outlet syndrome evaluation by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, serial filming; making scout films; assisting with sterile puncture, catheterization; identifying films; applying shielding; collimating; setting technical factors; positioning pt. for maneuvers; immobilizing; making serial films in coordination with injection; having films processed, reviewed; repeating, adjusting as ordered; placing arteriograms for use; recording examination.	2
518	Taking selective pulmonary angiograms or selective angiocardiograms of any patient by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, serial filming (single or biplane), magnification, spot filming, automatic pressure injection; making scout films; assisting with sterile puncture, catheterization, fluoroscopy; identifying films; applying shielding; collimating; setting technical factors; positioning, (continued)	2

TASK CODE	EXTENDED TASK NAME	VOL. NO.
518	(continued) immobilizing pt.; making serial films in coordination with injection; having films processed, reviewed; repeating, continuing, adjusting as ordered; placing angiograms for use; recording examination.	
519	Taking percutaneous coronary arteriograms and/or left ventriculograms of any patient, by reviewing request; measuring, reassuring pt.; setting up for fluoroscopy, single and/or biplane serial filming, cineradiography, videotaping, manual and/or automatic pressure injection; making scout films; assisting with sterile puncture, catheterization, fluoroscopy, cine, videotaping; identifying films; applying shielding; collimating; setting technical factors; positioning, immobilizing pt.; coordinating serial exposures with injections; having films processed, reviewed; repeating, adjusting as ordered; placing angiograms for use; recording exam.	2
520	Preparing any patient and attaching electrodes for electrocardiogram monitoring, by reviewing orders; attaching electrodes as appropriate; removing when so ordered.	3
521	Applying digital or manual pressure to any patient's arterial or venous puncture site as ordered, by taking over from physician; applying fingertip or fist pressure for appropriate amount of time; checking bleeding and clot using sterile technique; reporting problem or arranging for dressing; reinforcing self-monitoring instructions to patient.	3
522	Applying pressure dressing to arterial or venous puncture site as ordered, by inspecting site for bleeding; applying pressure and reporting any bleeding or problem; applying gauze, pressure dressing and bandage; wrapping tightly; reporting and/or recording when completed.	3
523	Preparing computerized transverse axial tomography (C.T.T.) equipment for use, by turning on main units, adjusting voltage; carrying out warm-up procedures; checking; adjusting if fault problem using operator's manual; notifying appropriate staff member or deciding to notify service organization if fault not overcome, or deciding to test personally.	3
524	Providing preventive maintenance for display tube surface, camera, disc and/or tape drive units, and/or scanning assembly (especially water-using head box assembly) of computerized transverse axial tomography (C.T.T.) equipment, by checking and cleaning display tube surface, disc and/or tape drive units,	3

(continued)

TASK CODE	EXTENDED TASK NAME	VOL. NO.
524	(continued) camera assembly; inspecting water, head cone, headbag; cleaning water tank; cleaning or changing head cone, headbag; changing water; refilling head box; de-aerating water; repairing headbag; setting equipment at start positions.	
525	Checking calibration and accuracy of C.T.T. equipment by making test scans, by preparing and setting up for test scan(s) using water or appropriate phantom; checking system functioning; making scan with equipment in calibration position and entering calibration factors into memory, or observing signal level meters during scan and adjusting to read in proper range using detector sensitivity switches, so that water reads at predetermined density; checking accuracy of scan data against known standards; having adjustments made and/or reporting malfunctions; recording tests and results.	3
526	Taking computerized transverse axial tomographic (C.T.T.) scans of any patient by reviewing request; preparing equipment; setting technical factors, scan level; reassuring, preparing, positioning, immobilizing pt.; providing shielding; running scans as ordered using appropriate controls; viewing scans; adjusting viewer controls; making line print-outs, photographs of scan displays as ordered; recording scans on magnetic tape; presenting scans for review by radiologist; assisting with IV injection of contrast; continuing, repeating scans; recording, reviewing as ordered; having pt. returned; placing C.T.T. scans for use; recording examination.	2
527	Retrieving, displaying and making photographs, printouts and/or magnetic tape records of computerized transverse axial tomographic (C.T.T.) scans, by reviewing requests; preparing equipment; locating scans on disc or tape; viewing scans on display and adjusting as requested by radiologist or as ordered; making photographs of scan displays; making line print-outs of scans; recording scans on magnetic tape, as ordered; presenting for review; discussing, continuing as ordered; placing scan records for use.	3
528	Designing, maintaining, evaluating calibration and/or dose monitoring program in diagnostic radiology, by considering equipment, examinations, accessories, types of monitoring measures, types of calibration tests, information needed, equipment alternatives; designing report forms, dosage charts, technique adjustment charts; selecting test and/or monitoring procedures; presenting program; spot checking, evaluating current program.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
529	Checking x-ray field limitation, x-ray receptor and light field alignment, minimum TOD, TFD and field size indicators for diagnostic x-ray equipment by inspecting for appropriate features; setting up radiographic tests; making exposures; calculating dimensions, differences from required dimensions, and whether differences are within acceptable ranges; arranging for replacement or repair; recording test results.	3
530	Checking fluoroscopic and spot film x-ray field limitation, x-ray field and image receptor alignment, maximum TID, minimum TOD, and other requirements by inspecting, setting up radiographic tests; making exposures; calculating dimensions, differences from required dimensions, and whether differences are within acceptable ranges; arranging for replacement or repair; recording test results.	3
531	Testing whether diagnostic x-ray tube overload protection and/or effective focal spot size meet acceptable standards, by testing overload system for response at varying factor settings against tube rating chart without making exposure; measuring effective focal spot size using bar or star pattern images of radiographed test objects, and/or pin hole test with radiography and enlargement factor to calculate focal spot size; determining whether overload protection and/or focal spot size is within acceptable range; determining whether equipment needs replacement or repair; recording test results; arranging for repair or replacement.	3
532	Checking and/or performing direct calibration tests of diagnostic radiography equipment exposure timers by checking correct type and functioning; testing time selectors with radiation detection device and pulse counter, chronometer or oscilloscope during exposure; calculating accuracy range, reproducibility; determining whether timer needs replacement, repair, and/or change in technique charts; recording test results; arranging for repair.	3
533	Checking automatic exposure termination of diagnostic radiography equipment by making test exposures at constant density settings with different kVp's or different phantom thicknesses; using densitometer to measure density of exposed films; calculating accuracy; determining whether automatic timer needs replacement, repair; recording test results; arranging for repair.	3
534	Providing visual and radiographic or fluoroscopic inspection of personnel shielding devices such as leaded gloves, aprons, sheets, gonadal shields by manually examining; checking for lead equivalent thickness of shielding using fluoroscopy or	3

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TASK CODE	EXTENDED TASK NAME	VOL. NO.
534	(continued) overhead filming; arranging for repair, replacement; recording inspection and test results.	
535	Performing calibration tests of kVp, mA, mAs, exposure rates, reproducibility on diagnostic radiography equipment using direct measuring instruments and/or radiographic comparisons by carrying out approved tests of kVp, waveform, kVcp, mAs, exposure rates with variable kVp and mA at appropriate technical factors; taking direct readings of current, kilovoltage, waveforms during exposures, or making appropriate exposures with calibrated test cassettes using visual comparisons or densitometer; calculating average exposure ratios, coefficients of linearity, variation; evaluating test results; determining whether equipment needs replacement, repair,further testing, change in technique charts; recording test results; arranging for repair.	3
536	Providing visual and/or manual inspection of diagnostic radiography system, by checking hardware, movable parts, position locks, beam limiting devices, illuminators visually and manually; checking wires and cables for damage, proper draping, proper grounding; checking accuracy of beam angle and positioning indicators; recording inspection; arranging for repair, replacement.	3
537	Checking diagnostic tomography x-ray equipment for mechanical operation, fulcrum position, resolution, exposure uniformity and/or grid alignment by setting up; making visual and mechanical checks; using test phantoms and making radiographic test exposures; evaluating test films and/or calculating differences from required standards; arranging for replacement or repair; recording test results.	3
538	Estimating HVL and checking adequacy of filtration of diagnostic x-ray equipment by setting up exposure detector test equipment; making exposures at constant technical factors with increasing filtration; recording; plotting exposure against added filtration on semi-log paper; estimating HVL; comparing with acceptable limits; arranging for replacement filtration if appropriate; recording test results.	3
539	Checking bucky grid alignment and/or centering in diagnostic radiography equipment by directly sighting and measuring; or by making test radiographs of phantom using fixed exposures or image of pin; by evaluating right-left density on image of phantom; evaluating test films and/or calculating differences from required standards; deciding, arranging for replacement or repair; recording test results.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
540	Checking fluoroscopic automatic brightness control system and/or focus, resolution and distortion of the optical system, by setting up tests for minimum, maximum automatic and manual techniques; measuring exposure and density with full and half phantoms, with paired hole penetrometer, and with lead plate; using mesh or slot hole phantom to check focus, resolution, distortion for fluoroscope, spot film, cine, video modes; reviewing results; calculating whether unit meets acceptable standards; determining whether equipment needs replacement, repair; recording test results; arranging for repair.	3
541	Evaluating accepted and rejected radiographs to identify any technical problems with staff functioning, equipment, radiation protection by noting any technical problems on radiographs; determining possible causes; discussing remediation and/or arranging for inspection or repair of equipment; recording results.	3
542	Designing, maintaining, evaluating darkroom and/or film processor monitoring program in diagnostic radiology, by considering equipment, accessories, types of monitoring measures, types of quality control procedures and tests, information needed, equipment alternatives; designing report forms; selecting test and/or monitoring procedures; presenting program; spot checking, evaluating current program.	3
543	Monitoring and evaluating x-ray film processors by exposing test films with sensitometer or radioactive source; processing films; measuring density, fog with densitometer; recording inlet and wash water and developer temperatures; calculating, plotting variations over time; determining if intra- and inter-processor variations are within acceptable range; arranging for adjustment or repair; recording.	3
544	Determining exposure characteristics of x-ray and/or dosimetric films by obtaining film samples; setting up for and making test exposure using sensitometer and step tablet or x-ray unit and penetrometer; having films processed; reading and recording densities using densitometer; averaging figures; plotting net optical density against log exposure or aluminum thickness; examining characteristic curves; evaluating relative speed or contrast of screen-film or nonscreen films; determining acceptability of questionable film batch or determining appropriate uses for new film types or outdated films; recording.	3
545	Monitoring patient exposure rates for routine diagnostic x-ray procedures by setting up exposure detector(s); simulating and recording exposure for routine examination conditions; reviewing	3

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TASK CODE	EXTENDED TASK NAME	VOL. NO.
545	(continued) results; evaluating whether examination exposure is acceptable or can be reduced; determining whether equipment needs testing, shut down; posting exposure rates for examinations; recording monitoring results; recommending gonadal shielding.	
546	Designing, maintaining, evaluating radiation protection and monitoring programs in diagnostic radiology by considering equipment, institutional work requirements, current literature and legislation; developing programs to decide on structural shielding, equipment, deployment of equipment, personnel, to survey radiation rates in installation, to check on use of safe practices and shielding, to monitor personnel exposure, to calibrate test instruments; designing report forms; selecting test and/or monitoring procedures; presenting program; spot checking; evaluating current programs.	3
547	Determining primary and secondary structural shielding required for diagnostic x-ray installations by determining values for the relevant parameters, variables; making calculations for thickness required for primary beam attenuation, and secondary, scatter and leakage radiation for all surfaces; determining whether current installation meets minimum requirements; determining thickness needed in addition to existing structures; presenting information for alternative materials and costs; discussing; recording calculations and decisions arrived at.	3
548	Checking maximum entrance exposure rate and primary barrier transmitted radiation rate for fluoroscopic equipment by setting up for tests; making exposures at maximum settings, with lead plate for automatic brightness control; measuring exposure using ion chamber; making exposure on protective barrier with beam attenuator in place; calculating exposure and radiation rates; comparing results with acceptable limits; determining whether equipment needs replacement, repair; recording test results.	3
549	Checking the leakage radiation rate from the source assembly of diagnostic x-ray equipment by setting up for test using fluorescent strips; making exposures; noting leakage points; making and recording radiation rates in all directions from tube target at appropriate distance; calculating average leakage radiation rates; comparing results with acceptable limits; determining whether equipment needs replacement, repair; recording test results.	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
550	Conducting protection survey of stray radiation within diagnostic x-ray installation and transmission across primary and secondary protective barriers, by setting up for typical and worst exposure conditions; placing exposure detector; making and recording exposures within room, behind protective barriers; creating isodose chart; determining whether exposure is within acceptable limits for personnel maximum permissible dose equivalents; suggesting corrections, deployment of staff in room; determining whether equipment needs testing, replacement, repair; recording results and/or preparing report.	3
551	Preparing personnel radiation monitoring dosimetric film or TLD badges and distributing by checking for pretesting, annealing; identifying batch; selecting samples for calibration and background; assembling inserts; identifying inserts and/or placing in badge holders; distributing; recording.	3
552	Collecting and/or distributing personnel monitoring dosimetric badge inserts and preparing for outside or in-house processing and reading, by distributing new inserts; collecting or receiving exposed inserts; obtaining appropriate samples for calibration and background control; placing for processing or for shipment; recording.	3
553	Reading and recording exposure from personnel monitoring film or thermoluminescent dosimeters by disassembling; obtaining proper samples; making calibration exposures; having samples and films processed together; reading TL or density background; reading calibration density or thermoluminescence using densitometer or TL reader; determining background and calibration factors; reading dosimeters; subtracting background factor, multiplying by calibration factor, or using similar procedure to obtain cumulative exposure; recording exposure and identification information; placing readings for further use.	3
554	Entering, evaluating occupational radiation exposure data and initiating action on dangerous levels by obtaining records of exposure from personnel monitoring dosimeters for the period, in relation to single incidents,or testing; entering in record log and/or posting sheets; comparing with maximum permissible doses and danger levels; recording evaluation; initiating follow-up such as interviews to investigate and/or to have report made; preparing regular report(s).	3

TASK CODE	EXTENDED TASK NAME	VOL. NO.
555	Investigating reasons for reported high occupational radiation exposure and initiating remediation by conducting interviews with staff members involved; investigating reasons; initiating tests; reporting unsafe practices; arranging for medical examination of staff person; preparing report on what was done; and placing for distribution.	3
556	Calibrating diagnostic x-ray test, survey, or measuring instruments, by following standard procedures, using appropriate instruments; calculating correction factor; deciding on repair; recording calibration.	3
557	Collecting and presenting technical information about and/or recommending new diagnostic x-ray equipment by determining institutional and safety needs, current capacities; collecting information on equipment available, costs, installation requirements; making suggestions; presenting opinions; recording.	3
558	Providing clinical training for staff in a diagnostic radiology department in quality assurance tests of equipment, in radiation protection procedures, and related maintenance by demonstrating procedures such as calibration, safety conformance tests, film processor monitoring, tests of patient exposure rates, calculations of structural shielding requirements, making radiation protection survey tests, steps of personnel monitoring program, preventive maintenance; explaining what is being done; answering questions; deciding when staff can perform tasks under direct supervision; observing and correcting; advising as requested or as deemed necessary.	3
559	Planning and presenting lectures and/or related laboratory sessions on radiation and/or health physics for students in professional programs for diagnostic radiology, in medical school, or in medical sciences by selecting or ascertaining content; determining level of detail, method of presentation; selecting instructional materials; arranging to have instruments and materials assembled; making presentation; conducting question and answer session; being aware of responses and adjusting to students' needs; evaluating students; recording if appropriate.	3
560	Preparing lectures or participating in meetings of staff members in diagnostic radiology on radiation protection and quality assurance requirements and practices, by selecting and preparing presentations; demonstrating or presenting practices; providing information on reasons for and descriptions of safe practice procedures, provisions for quality assurance; relating content to tasks of various staff members; participating in discussions.	3